w = 4/2

Astronomisches Jahrbuch

für

1913.

Der Sammlung Berliner astronomischer Jahrbücher einhundert und achtunddreißigster B.and.

Pod. 139

U

Berliner

Astronomisches Jahrbuch

für

1 9 1 3

mit Angaben für die Oppositionen der Planeten (1)—(691)

für

1911.

Herausgegeben

von dem

Königlichen Astronomischen Recheninstitut
unter Leitung von

Fritz Cohn.

Biblioteka Jagiellońska



Berlin

Ferd. Dümmlers Verlagsbuchhandlung (Kommissionsverlag)

1911.



Königliches Astronomisches Recheninstitut,

Berlin SW. 68, Lindenstr. 91.

Direktor: Dr. Fritz Cohn, Universitätsprofessor.

Observatoren: P. Lehmann, Professor,

F. K. Ginzel, Professor, A. Berberich, Professor, Dr. J. Peters, Professor,

Dr. J. Riem,

Dr. A. Stichtenoth,

Dr. H. Clemens.

Hilfsarbeiter: Dr. P. V. Neugebauer.

Mitarbeiter: Dr. P. Neugebauer, Professor.

11 crasop. 138 (1913)

Vorwort.

Die Grundlagen des Berliner Astronomischen Jahrbuchs.

Den Ephemeriden des Jahrbuchs liegen die folgenden Tafelwerke zu Grunde:

Für die Sonne und die großen Planeten Merkur, Venus, Mars, Uranus und Neptun: die Tafeln von Newcomb, für Jupiter und Saturn: die Tafeln von Hill, enthalten in:

> Astronomical Papers of the American Ephemeris, Vol. VI, Part I—IV: Tables of the four inner planets, Vol. VII, Part I—IV: Tables of Jupiter, Saturn, Uranus, Neptun.

Für den Mond:

Tables de la lune von P. A. Hansen, unter Verbesserung der Tafel 34 für das Fundamentalargument nach Newcomb. Außerdem enthalten die Mondörter die empirischen Korrektionen von Newcomb nach: "Corrections to Hansen's tables of the Moon" (Washington, 1878).

Für den scheinbaren Mondradius ist der von J. Peters ermittelte Wert 15' 32".59 entsprechend der Parallaxe 57' 2".27 benutzt (A. N. Bd. 138, S. 147).

Bei der Berechnung der Mondörter hat die ausführliche Mondephemeride des Nautical Almanac der Redaktion infolge Übereinkommens mit der "Nautical Almanac Office" in den Aushängebogen zur Verfügung gestanden.

Für die Fixsterne:

Neuer Fundamentalkatalog des Berliner Astronomischen Jahrbuchs nach den Grundlagen von A. Auwers, für die Epochen 1875 und 1900 bearbeitet von Dr. J. Peters (Veröffentlichung Nr. 33 des Königlichen Astronomischen Recheninstituts). Als Werte der fundamentalen Reduktionskonstanten sind nach den Beschlüssen der Pariser Konferenz vom Mai 1896 (Conférence internationale des étoiles fondamentales. Procès-verbaux. Paris 1896) angenommen:

> Die Präzessions-Größen nach S. Newcomb (Astr. Papers Vol. VIII, Part I). Die Nutations-Konstante . . 9".21

Die Aberrations-Konstante . . 20".47 Die Sonnen-Parallaxe . . . 8".80

Ferner sind in allen Ephemeriden der Sonne, der Planeten und der Fixsterne die kurzperiodischen, von der Mondlänge abhängigen Nutationsglieder weggelassen; doch bietet das Jahrbuch die Möglichkeit, auch diese weggelassenen Glieder zu berücksichtigen (s. Erläuterungen).

An Änderungen gegenüber dem Vorjahr ist zu erwähnen, daß die Angaben über die Mondsterne fortgelassen sind, in die scheinbaren Örter der Polsterne der Betrag der kleinen Nutationsglieder nicht hineingezogen, sondern gesondert beigefügt ist, sowie daß den am Schluß folgenden umgearbeiteten "Erläuterungen zum Gebrauch des Jahrbuchs" eine kurze Erklärung der Hauptbegriffe der sphärischen Astronomie vorausgeschickt ist.

Berichtigungen.

Jahrbuch 1912.

Seite 71 Okt. 8 U Mittlere Zeit lies 10^h 28^m.0 anstatt 10^h 8^m.0 Seite 333 ζ² Scorpii AR. Dez. 6—36 lies 24*.86 25*.06 25*.32 25*.64 Seite 472 Göttingen Geoz. Breite lies +51° 20′ 34″.9 anstatt 34″.6 desgl. in den früheren Jahrgängen.

Jahrbuch 1913.

Seite 166 Nr. 698 ζ Pavonis Dekl. lies —71° 30′ 15″.40 anstatt + Seite 247 μ Ceti AR. Dez. 36 lies 18".28 anstatt 18".48 Seite 260 9 Camelop. tg δ lies +2.267 anstatt +1.267

Scite 269 ξ Canis maj.
lies ζ Canis maj. von Jahrgang 1908 au.

Inhalt.

	Seite
Vorwort	V
Zeit- und Festrechnung	IX
Reduktionselemente	I
Sonnenephemeride	2
Rechtwinkelige Sonnenkoordinaten	2,2
Mondephemeride	42
Ephemeride des Mondkraters Mösting A	82
Lage des Mondaquators und Mondbewegung	87
Auf- und Untergang der Sonne und des Mondes für Berlin	89
Geozentrische Örter der Planeten: Merkur, Venus, Mars, Jupiter, Saturn,	
Uranus und Neptun	94
Heliozentrische Örter derselben Planeten und der Erde	144
Mittlere Örter von 925 Fixsternen	149
Scheinbare Örter von 573 Fixsternen	173
Reduktionstafeln	372
Finsternisse	398
Sternbedeckungen	406
Erscheinungen der Jupiterstrabanten	416
Lage und Größe des Saturnsringes	422
Erscheinungen der Saturnstrabanten	424
Erscheinungen der Saturnstrabanten	451
Hilfstafeln	
Mondlibration	452
Bruchteile des Jahres	455
Julianische Periode	457
Verwandlung der Mittl. Zeit in Sternzeit	459
Verwandlung der Sternzeit in Mittl. Zeit	460
Verwandlung der Dezimalteile des Tages in Stunden, Minuten,	
Sekunden und umgekehrt	461
Hilfsgrößen zur Berechnung der Präzession	463
Hilfsgrößen zur Übertragung mittlerer Polsternörter von verschiedenen	
Äquinoktien auf 1913.0	464
Koordinaten der Sternwarten	465
Bahnelemente der kleinen Planeten	(2)
Oppositionen und genäherte geozentrische Örter der Planeten (1) - (691)	
für 1911	(39)
Sammlung von Oppositionsephemeriden kleiner Planeten für 1911	(53)
Nachweisungen über die Planeten (1) — (691)	(74)
Erläuterungen	[1]

Astronomische Zeichen und Abkürzungen.

Bezeichnung	Adspekten.
der	& Konjunktion.
Wochentage.	□ Quadratur.
O Sonntag.	& Opposition.
《 Montag.	
♂ Dienstag.	Mondphasen.
\$ Mittwoch.	 Neumond.
4 Donnerstag.	• Erstes Viertel.
♀ Freitag.	O Vollmond.
to Sonnabend.	• Letztes Viertel.

Zeichen

des Tierkreises und der Himmelskörper.

Υ Widder		0	Grad.		
∀ Stier		30	>>	\odot	Sonne.
		60	>>	0	Mond.
9 Krebs		90	>>	Ď	Mercur.
Ω Löwe		120	>>	2	Venus.
my Jungfrau .		150	>>	な	Erde.
≃ Waage		180	>>	3	Mars.
m Skorpion .		210	>>	24.	Jupiter.
₹ Schütze		240		11	Saturn.
る Steinbock .		270	>>	ð	Uranus.
	111	300	>>	Ψ	Neptun.
Ж Fische		330	»		

Zeit- und Festrechnung 1913.

Das Jahr 1913 entspricht dem Jahr 6626 der Julianischen Periode und dem Jahr 7421 — 7422 der Byzantinischen Äre.

Gregorianischer oder Neuer Kalender.	Julianischer oder Alter Kalender.
Goldene Zahl 14	14
Epakten XXII	IV
Sonnenzirkel 18	18
Römer Zinszahl . II	II
Sonntagsbuchstab E	\mathbf{F}
Septuagesima Jan. 19	Febr. 10
Aschermittwoch . Febr. 5	Febr. 27
I. Quatember Febr. 12	März 6
Ostersonntag März 23	April 14
Himmelfahrt Mai I	Mai 23
Pfingstsonntag Mai 11	Juni 2
II. Quatember Mai 14	Juni 5
III. Quatember Sept. 17	Sept. 18
I. Advent Nov. 30	Dez. I
IV. Quatember Dez. 17	Dez. 18

Kalender der Mohammedaner.

1331 (Gemein	ijahr)						
Safar I					1913	Jan.	10
Rebî-el-awwel 1					>>	Febr.	8
Rebî-el-accher I					>>	März	10
Dschemâdi - el - aw	wel 1				>>	April	8
Dschemâdi-el-ac	cher I				>>	Mai	8
Redscheb I .					>>	Juni	6
Schaban I .					>>	Juli	6
Ramadan I .					>>	Aug.	4
Schewwâl I .					>>	Sept.	3
Dsu 'l-kade I					>>	Okt.	2
Dsù 'l-hedsche I					>>	Nov.	I
1332 (Gemein	iahr)						
Moharrem I .	J				>>	Nov.	20
						~	~
Safar I					>>	Dez.	3C

Kalender der Juden.

5673	Schebat	I		-
	Adar	I	»	Febr. 8
		14	Klein Purim »	21
	Veadar	I	»	März 10
		11	Fasten-Esther »	20
		14	Purim	23
		15	Schuschan - Purim	24
	Nisan	I	»	April 8
		15	Passah - Anfang* »	22
		16	Zweites Fest* »	23
		21	Siebentes Fest* · · · · · »	28
		22	Achtes Fest* »	2 9
	Ijar	1	»	Mai 8
		18	Lag-Bomer »	25
	Sivan	1		Juni 6
		6	Wochenfest*	11
		7	Zweites Fest* »	12
	Thamuz	Í	»	Juli 6
		17	Fasten. Tempeleroberung »	22
	Ab	1	»	Aug. 4
		9	Fasten. Tempelverbrennung »	12
	Elul	J	»	Sept. 3
				och. 3
	Ordentlicl Gemeinja	ies hr		
T	'is c hri	1	Neujahrsfest* »	Okt. 2
		2	Zweites Fest* »	3
		4	Fasten-Gedaljah »	5
		10	Versöhnungsfest* »	11
		15	Laubhüttenfest* »	16
		16	Zweites Fest* »	17
		21	Palmenfest »	22
		22	Versammlung oder Laubhüttenende* . »	23
		23	Gesetzesfreude* »	24
Marc	heschwai	.,	»	Nov. I
	Kislev	1	»	30
		25	Tempelweihe »	Dez. 24
	Tebet	I		30
		^		5~

1913	Schief mittler	e der Eklipt e wahr				Parallaxe der Sonne
		23°				
Jan. o	27 2.	1 .	.68 — 0		20.82	8.95
10	2.		.77 + 1			8.95
20	2.:			.68 0.81		8.94
30	2.	•		96 0.48		8.93
Febr. 9	2.	-		.43 0.30		8.92
19	27 2.	11 27 11	.47 + 6.	.81 —0.28	20.70	8.90
März 1	2.0	09 11	.61 8.	.19 0.40		8.88
11	2.0	-		56 0.62	20.60	8.86
2.1	2.0	07 11	.72 10	.94 0.90	20.54	8.83
31	2.0	6 11	.68 12	31 1.17	20.48	8.81
April 10	27 2.0	04 27 11	.58 +13.	.69 —1.39	20.42	8.78
20	2.0	03 11	.43 15	.07 1.53	20.36	8.76
30	2.0	02 11		.44 1.54	20.31	8.73
Mai 10	2.0	00 11	.05 17	.82 1.40	20.26	8.71
20	1.9	99 10	.87	.19 1.13	20.22	8.69
_ 30	27 1.9	98 27 10	.71 +-20.	.57 -0.74	20.19	8.68
Juni 9	1.0	97 10	.59 21.	.95 -0.26	20.16	8.67
19	1.9	95 10	.53 23.	32 +0.28		8.66
T 29	1.9	94 10	.53 24			8.66
Juli 9	1.9	93 10	.59 26.	07 1.35	20.13	8.66
19	27 1.9					8.66
29	1.0		.83 28.	9		8.67
Aug. 8	1.8	,	.00 30.	_		8.68
18	1.8		.16 31.	2		8.70
28	1.8	36 11	.30 32.	95 2.32	20.27	8.72
Sept. 7	27 1.8	- '				8.74
17	1.8		.45 35	_	J,	8.76
OL + 27	1.8		.43 37	_	13	8.78
Okt. 7	1.8		.35 38.			8.81
17	1.8	80 11	.21 39.	83 1.15		8.83
27	27 1.		- '	21 4-1.07		8.86
Nov. 6	1.		.82 42.	-		8.88
16	1.		.60 43.			8.90
Don 26	1.	, ,	.40 45			8.92
Dez. 6	1.7	74 10	.24 46.	71 2.25		8.93
16	27 1.	72 27 10	.14 +48.	.09 -1-2.84		8.94
26	1.7	71 10	.10 49	21		8.95
36	1.	70 10	.14 50	.84 4.08	20.82	8.95

Mittlere Schiefe der Ekliptik für 1910.0 = 23° 27′ 3″.58.

Monats- und Wochentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg.~ Daner St - Zt.	Halbm.
	+ 3 3.73 3 32.40 4 0.77 + 28.82 + 56.51 5 23.81 5 50.68 6 17.09 6 43.02 7 8.44 + 7 33.30 7 57.58	18 41 5.50 18 45 30.73 18 49 55.66 18 54 20.27 18 58 44.52 19 3 8.38 19 7 31.81 19 11 54.78 19 16 17.27 19 20 39.24 19 25 0.66 19 29 21.50	ni 8 4 25-23 4 24-93 4 24-61 4 24-25 4 23-86 4 23-43 4 22-97 4 21-97 4 21-42 4 20-84 4 20-25	-23° 7° 0.4 23° 2° 26.2 22° 57° 24.3 22° 51° 55.0 22° 45° 58.3 -22° 39° 34.4 22° 32° 43.5 22° 25° 25.9 22° 17° 41.7 22° 9° 31.2 -22° 0° 54.6 21° 51° 52.3	4 34.2 5 1.9 5 29.3 5 56.7 6 23.9 6 50.9 7 17.6 7 44.2 8 10.5 8 36.6 9 2.3 9 27.9	141.93 141.85 141.76 141.55 141.44 141.32 141.19 141.06 140.92 140.77 140.61	16 15.99 16 15.99 16 15.98 16 15.97 16 15.95 16 15.93 16 15.91 16 15.88 16 15.85 16 15.81 16 15.77
12 St 13 Mo 14 Di 15 Mi 16 Do 17 Fr 18 Sa 19 St 20 Mo 21 Di 22 Mi 23 Do 24 Fr	8 21.27 8 44.33 9 6.74 1- 9 28.49 9 49.55 10 29.52 10 48.40 11 6.53 11 23.91 11 40.52 11 56.36 12 11.42	19 33 41.75 19 38 1.37 19 42 20.34 19 46 38.64 19 50 56.26 19 55 13.16 19 59 29.34 20 3 44.79 20 7 59.48 20 12 13.41 20 16 26.58 20 20 38.98 20 24 50.60	4 19.62 4 18.97 4 18.30 4 17.62 4 16.90 4 16.18 4 15.45 4 14.69 4 13.93 4 13.17 4 12.40 4 11.62	-21 11 30.4 21 0 23.4 20 48 52.4 20 36 57.7 20 24 39.7 -20 11 58.7 19 58 55.0 19 45 29.0	9 53.2 10 18.1 10 42.7 11 7.0 11 31.0 11 54.7 12 18.0 12 41.0 13 3.7 13 26.0 13 47.9 14 9.5	139.16 138.96 138.75 138.54	16 15.73 16 15.68 16 15.57 16 15.50 16 15.44 16 15.37 16 15.20 16 15.11 16 15.01 16 14.91 16 14.80
25 Sa 26 St 27 Me 28 Di 29 Mi 30 Do 31 Fr Febr. 1 Sa 2 St 3 Mc 4 Di 5 Mi 6 Do 7 Fr 8 Sa	+12 25.71 12 39.21 12 51.92 13 3.84 13 14.97 +13 25.30 13 34.83 13 43.56 13 58.59 +14 4.88 14 10.36	20 29 1.44 20 33 11.50 20 37 20.77 20 41 29.25 20 45 36.93 20 49 43.82 20 53 49.91 20 57 55.20 21 1 59.67 21 6 3.33 21 10 6.18 21 14 8.22 21 18 9.45 21 22 9.87	4 5.20 4 4.4' 4 3.66 4 2.8 4 2.0.4 1.2 4 0.4	-19 3 0.7 18 48 8.9 18 32 56.5 18 17 23.9 18 1 31.4 -17 45 19.5 17 28 48.5 17 11 58.9 16 54 51.0 16 37 25.2 -16 19 42.0 16 1 41.8 15 43 25.0	17 43.1 18 0.3 18 16.3 18 32.1 18 48.4	137.89 137.67 137.44 137.21 136.98 136.75 136.52 136.60 135.83 135.60 135.83	16 14.69 16 14.57 16 14.44 16 14.31 16 14.03 16 13.83 16 13.58 16 13.43 16 13.27 16 13.11 16 12.94 16 12.77 16 12.60

	nats- ind													Nut.	11
- Jany			, L	ster.	nzeit		M1U Län	tleres A		i. 191 Diff.	3.0 Breite	Lg. Rad. v.	Diff.	in o".	10
	esta	2	1				17411	20		17111.	Interce	1	<u> </u>	dλ	dε
Jan.	0	0	181	38	n 1.77	270	26	47.37	-	, ,	-0.04	9.9926578		- 3	+8
	ı	I			58.33			57.42		10.05	0.17	9.9926575	3	- 9	+6
	2	2	18	45	-	281		_	1	10.36	-0.29	9.9926593	18	-13	+2
	3	3	18		51.45			18.38	1	10.60	-0.39	9.9926630	37	-13	-2
	4	4	18		48.01			29.15		10.77	-0.46	9.9926685	55	- 9	-6
			_						61	10.87			73		
	5	5	18		44.57			40.02	61	10.86	-0.51	9.9926758	91	- 3	-8
		6	19		41.13			50.88	61	10.75	-0.54	9.9926849	108	+ 5	9
	7	7	19	5		286		1.63	6 r	10.54	-0.53	9.9926957	125	+13	-8
	8	8	19	-	34.25		_	12.17	61	10.24	0.50	9.9927082	142	+19	5
	9	9	19	13	30.80	288	37	22.41	61	9.86	-0.45	9.9927224	159	+22	- I
	10	10	19	17	27.36	289	38	32.27	6 r	9.41	-0.38	9.9927383	178	+20	+3
	11	ΙI	19	21	23.92	290	39	41.68	61	8.89	-0.29	9.9927561	196	+14	+6
	12	12	19	25	20.48	291	40	50.57	61	8.30	-0.18	9.9927757	215	+ 4	+8
	13	13	19	29	17.04	292	41	58.87	61	7.64	-0.06	9.9927972	236	6	+9
	14	14	19	33	13.60	293	43	6.51	61	6.90	+0.06	9.9928208	256	-16	+7
	15	15	19	37	10.15	294	44	13.41	61	6.12	+0.19	9.9928464	278	-23	+5
	16	16	19	41	6.71	295	45	19.53	61		+0.31	9.9928742		-27	+1
	17	17	19	45	3.27			24.84	61	5.31	-1-0.41	9.9929042	300	-26	-3
	18	18	-	-	59.83			29.30	61	4.46	+0.48	9.9929366	324	-21	-6
	19	19	19	52	56.39	298	48	32.89		3-59	+-0.53	9.9929716	350	-12	-9
	20	20	19	56	52.95	299	49	35.61	61	2.72	+0.55	9.9930093	377	_ 2	-9
	21	21	20	-	49.50			37.47	61	1.86	+-0.54	9.9930496	403	+ 8	-7
	22	22	20		46.06			38.53	61	1.06	+0.50	9.9930927	431	+15	-4
	23	23	20		42.62		-	38.83	61	0.30	+0.43	9.9931387	460	+19	0
	24	24	20	12	39.18			38.42		59-59	+0.33	9.9931874	487	+18	+4
		25	20	16	35.73					58.92	+0.21	9.9932388	514	_1_14	_L.77
	-	26			32.29	_	-	37·34 35.61		58.27	+0.09	9.9932308	540	+14	+7
		27			28.85	306		33.23		57.62	-0.04	9.9932920	565	- I	+9
	-	28			25.41	307	57	30.20		56.97	-0.17	9.9933493 9.9934081	588	8	+7
		29			21.96	308		26.51	60	56.31	-0.29	9.9934690	609	-13	+3
							_		60	55.63			629		_
	30	30		-	18.52	309		22.14	60	54.90	-0.40	9.9935319	647	-13	—I
Febr.		31			15.08	311		17.04		54.10	-0.49	9.9935966	664	-11	-4
r 601.		32			11.64	312	Ι	11.14		53.23	-0.55	9.9936630	68a	- 5	-7
		33	20	48	8.19	313	2	4.37		52.28	-0.58	9.9937310	695	+ 3	-9
	3	34	20	52	4.75	314	2	56.65		51.25	-0.57	9.9938005	708	- -12	8
		35	20	56	1.30	315	3	47.90		50.14	− 0.54	9.9938713	722	+19	-6
		36	20	59	57.86	316		38.04		48.97	0.48	9.9939435	735	+21	-3
	6	37	21	3	54.42	317	5	27.01		47.72	-0.40	9.9940170	748	+21	$+\mathbf{I}$
		38	21	7	50.97	318		14.73		46.39	-0.31	9.9940918	761	+16	+5
	8	39	21	11	47.53	319	7	1.12	(,0	49.39	0.20	9.9941679	/01	+ 8	+8

Monats- und Wocheni		Zeitgle M. Zt	eichung – W. Zt.	Sch	einł	. AR.	Diff.	Scheiı	ıb. l	Dekl.	Diff.	Durchg Dauer St Zt.	Ha	ībm.
Febr. 7	Fr	1.74	18.89	27	20"	9.87	m #					701.00	76	TO 55
Febr. 7	Sa		-	21		- :	3 59.61		-	52.1	18 48.6	134.92		12.77
9	St		21.95 24.21		26	9.48 8. 2 9	3 58.81	15	6	3.5	19 3.9	134.69	_	12.43
10	Мо		25.66	21	30	-	3 58.01			59.6 40.9	19 18.7	134.47		12.25
11	Di		26.31	21	34 38	6.30	3 57.21	14 14	8	7.8	19 33.1	134.25		12.07
						3.51	3 56.42	_			19 47.1			_ '
12	Mi		26.18	21		59.93	3 55.65			20.7	20 0.6			11.89
13	Do		25.27			55.58	3 54.88	13		20.1	20 13.6	133.59		11.71
14	Fr	14	23.59	21		50.46	3 54.11	13	8	6.5	20 26.3	133.38		11.52
15	Sa	14	21.15	21		44.57	3 53-37		. ,	40.2	20 38.6	133.17	-	11.33
16	St	14	17.96	2.1	57	37.94	3 52.63	12	27	1.6	20 50.4	132.96	10	11.13
17	Мо	+14	14.04	22	I	30.57	3 51.91	12	6	11.2	21 1.8	132.76	16	10.93
18	Di	14	9.40	22	5	22.48	3 51.20	11	45	9.4	21 12.8	132.56	16	10.73
19	Mi	14	4.05	22	9	13.68	3 50.52	11	23	56.6	21 23.4	132.30	16	10.52
20	Do	13	58.01	22	13	4.20	3 49.85	11	2	33.2	21 33.7	1122.17	16	10.31
21	Fr	13	51.30	22	16	54.05	3 49.20	10	40	59.5	21 43.0	131.98	16	10.09
22	Sa	+13	43.95	22	20	43.25		-10	19	15.9		121.70	16	9.87
23	St	13		22	24	31.83	3 48.58	9		22.9	21 53.0	T2T.6T	16	9.64
24	Mo	13		22	28	19.80	3 47.97	ĺ .		20.7	22 2.3	T21 /2	16	9.41
25	Di	13	18.22	22	32	7.18	3 47.38 3 46.81			9.7	22 11.0	TOT OF	16	9.17
26	Mi	13	8.48	22	35	53.99		1 0	50	50.4	22 19.	1 131.09	16	8.93
27	Do	+12	58.18	22	39	40.25	3 46.26	- 8	28	23.I	22 27.	130.92	16	8.69
28		1	47.35	22	0,		3 45.73	8		-	22 35.	130.76	16	
März 1			36.01	22			3 45.22	7		,	22 42.	120.61	16	
2		1	24.17	22	' '		3 44.71	7		17.1	22 48.	130.46	16	
3		12		22		40.14	14 44.4	6		21.8	22 55.	130.32	16	
							3 43.7	7			23 1.	2.	7.6	
4		+11	J/ _	1	_		3 43.3	-6		20.6	23 6.	9 130.18	16	, ,
5	.	I		"		,	12 42.0	, 6		.,,	23 12.		16	. '.
6		I	2, 2	_	_		3 44.4	5 5			123 10.	8 129.92 129.80	16	
7		13	_	1 ~	_		13 42.0	5			24 41	1 129.60	16	. , '
C			5 55		3 13		3 41.6	, 5) 1	23.8	22 25.		1	
9	St	+10	48.65	23	3 16	56.26	3 41.3	/	1 37			6 129.58	16	
10		10	25.		3 20		3 40.9	/			22 21	7 129.48		
11	1	10	/	- 1		18.52	3 40.6			58.5	23 34	129.38		_
12	Mi	10			3 27	7 59.14	3 40.3	1 2	3 27	7 24.1	23 36	7 129.29		
13	Do	9	9 45.61	2	3 31	39.44	3 40.0	1 :	3 3	3 47.4	23 38	1 120.20	16	5.15
Id	Fr	+ 9	9 29.06	23	3 35	19.49	:	1 - 3	2 40	8.8	5	120.12	16	6 4.89
14	Sa		9 12.23	2	3 38	59.17	7 3 39.7		2 16	28.6	23 40	1 120.05	16	6 4.63
16	St		8 55.14	2	3 42		14 41.4		1 52	47.2	23 41	1 128.08	16	4.37
1'	7 Mc		8 37.82	2	3 46	5 17.87	3 39.2		1 29	5.1	23 42	1128.92	16	6 4.10
18	3 Di		8 20.28	3 2	3 49	56.88	3 3 37.0		I :	5 22.6	73 44	128.87	16	3.84

	nats-		Si	tern	zeit	I	littl	eres Ä	զս. 191	3.0	Lg. Rad. v.	Diff.	Nut.	
Jahr			~.		2010		Läng	ge	Diff.	Breite		D111.		dε
Febr.	7	38	2 I	7"	50.97	318°	6'	14.73	1 11	_o"31	9.9940918		+16	
	8	39		-	47.53	319	7	1.12	60 46.39	-0.20	9.9941679	761	+ 8	+8
	9	40			44.08	320		46.10	60 44.98	-0.08	9.9942452	773	- 2	+9
	10	41	21	-	40.64	321		29.59	60 43.49	+0.05	9.9943238	786	-13	4-8
	11	42	21	-	37.20	322		11.51	60 41.92 60 40.30	+0.18	9.9944037	799 813	-21	+6
	12	43	21	27	33 75	323	9	51.81	60 38.63	+0.30	9.9944850	827	-26	+2
	13	44			30.31	324	IO	30.44	50 36.90	+0.40	9.9945677	843	-27	-2
	14	45	21	35	26.86	325	11	7.34	60 35.13	-+0.48	9.9946520	859	-23	6
	15	46	21	39	23.42	326	II	42.47	60 33.34	+0.53	9-9947379	875	-15	8
	16	47	21	43	19.97	327	12	15.81		+0.55	9.9948254	894	- 5	-9
	17	48	21	47	16.53	328	12	47.34	60 31.53	+-0.55	9.9949148	, ,	+ 4	-8
	18	49	21		13.08	-		17.07	60 29.73	+0.52	9.9950062	914	+13	5
	19	50	21	55	9.64	-	-	45.04	60 27.97	+0.45	9.9950996	934	+18	— I
	20	51	2 T	59	6.19			11.29	60 26.25	-+0.35	9.9951950	954	19	+3
	21	52	22	3	2.75		14	35.86	60 24.57 60 22.95	+0.23	9.9952925	975 996	+16	+6
	22	53	22	6	59.30	333	14	58.81	60 21.40	+0.10	9.9953921	1017	+ 9	+8
	23	54	22	10	55.86	334	15	20.21	60 19.90	0.04	9.9954938	1036	+ 2	+9
	24	55	22	14	52.41	335	15	40. II	60 18.43	-0.17	9.9955974	1053	- 6	1-7
	25	56	22	18	48.97	336	15	58.54	60 16.98	0.30	9.9957027	1068	$-\pi \iota$	5
	2 6	57	22	22	45.52	337	16	15.52	60 15.52	-0.42	9.9958095	1082	-14	- T
	27	58	22	26	42.08	338	16	31.04	60 14.05	-0.50	9.9959177	1095	12	-3
	28	59	22	30	38.63	339	16	45.09	60 12.55	-0.55	9.9960272	1105	- 7	-7
Marz	. 1	60	22		35.19	340	16	57.64	60 11.01	0.58	9.9961377	1115	+ r	-9
	2	6 1	22	38	31.74	341	17	8.65	60 9.42	0.59	9.9962492	1123	+10	9
	3	62	22	42	2 8.29	342	17	18.07	60 7.78	0.56	9.9963615	1130	+17	-7
	4	63	22	46	24.85	343	17	25.85	60 6.09	-0.52	9.9964745	1135	+21	4
	5	64	22	50	21.40	344	17	31.94	60 4.35	-0.45	9.9965880	1140	+22	0
	6	65	22		17.95	345		36.29	60 2.54	-0.36	9.9967020	1145	+18	1-4
	7	66	22	-	14.51	346	17	38.83	60 0.67	-0.24	9.9968165	1149	+11	7
	8	67	23	2	11.06	347	17	39.50	59 58.74	-0.11	9.9969314	1151	+ 1	1-7
	9	68	23	6	7.62	348	17	38.24	59 56.74	+0.03	9.9970465		- 9	-1-9
	IC	69	23	10	4.17	349	17	34.98		1 -1-0.10	9.9971620	1158	18	-1-7
	11	70	23	14	0.72	350	17	29.67	59 54.69	+-0.27	9.9972778	1161	25	+3
	12	1 '	23	17	57.28	351	17	22.24	59 52.57 59 50.40	+0.37	9.9973939		27	1
	13	72	23	21	53.83	352	17	12.64	59 48.18	1-40.46	L .		-25	5
	14	73	23	25	50.39	353			50 45.02	1000	9.9976271		-18	
	15	74	23	29	46.94	354	. 16	46.74	59 43.63	1 -1-0 57		1179	1 X	1 1
	16	75	23	33	43.49	355		30.37	59 41.33	1 CX	9.9978622	1185	LL 2	
	17	1 '	23	37	40.05	356	16	11.70	59 39.02	+-0.50	1	7 1192	+11	
	18	77	23	41	36.60	357	7 15	50.72	, 37 39.0	1-1-0.49	9.9980999		+16	-3

Monats- und Wochentag		Zeitg M.Zt.	leichung - W.Zt.	Diff.	Scheinb. Dekl.			Diff.	Durchg Dauer St Zt,	Halbm.			
Manara	Mo	ı Q ⁿ	37.82	h	m ₁₇ .87	nı s		000			128.92	16	A T.C
März 17 18	Mo Di	8	20.28			3 39.01	I	29	5.1	23 42.5	128.87	16	3.84
	Mi	8			56.88	3 38.81	I	5	22.6	23 42.6	128.82	16	
19			2.54	23 53		3 38.64	0		40.0	23 42.3		-	3.57
20	Do E-	'	44.62	23 57		3 38.49	0	1	٠	23 41.7	128.77	16	3.30
21	Fr	7	26.56	0 0	52.82	3 38.37	+ 0	5	44.0	23 40.7	128.73	16	3.03
22	Sa	+7	8.37	0 4	31.19	3 38.27	+ 0	29	24.7	23 39.5	128.70	16	2.70
23	St	6	50.09	0 8	9.46	3 38 19	0	11	4.2	23 37.9	128.68	16	2.48
2,4	Мо	6	31.73	0 11	47.65	3 38.15	I	16	42.1	23 36.0	128.66	16	2.2
25	Di	6	13.32	0 15	25.80	3 38.12	1	40	18.1	23 33.8	128.64	16	1.93
2 6	Mi	5	54.89	0 19	3.92	3 38.12	2	3	51.9		128.63	16	1.6
27	Do	-1-5	36.45	0 22	42.04		+ 2	27	23.I	23 31.2	128.63	16	1.30
28	Fr	5	18.03		20.17	3 38-13	2	50		23 28.4	128.63	16	1.08
29	Sa	4	59.65		58.34	3 38.17	3		16.6	23 25.1	128.64	16	0.80
30	St		41.33	0 33		3 38.23	3		38.1	23 21.5	128.66	16	0.52
31	Мо		23.08	0 37	0.0	3 38.31	4		_	23 17.5	128.68	16	0.23
_			~5.00			3 38.40	i i			23 13.2			
April 1	Di	+4	4.93	0 40		3 38.52	-1- 4		8.8	23 8.5	128.70	15	59.9
2	Mi	3	46.89		31.80	3 38.65	4		17.3	23 3.5	128.73	15	59.6
3	Do	3	28.99	,	10.45	3 38.80	5	10		22 58.0	128.77	15	59.39
4	Fr	3	11.24	-	49.25	3 38.96	5	33	18.8	22 52.3	128.81	15	59.11
5	Sa	2	53.65	0 55	28.21	3 39.14	5	56	IIII	22 46.1	128.86	15	58.83
6	St	+2	36.23	0 59	7.35		+ 6	18	57.2		128.91	15	58.5
7	Mo	2,	19.01		46.69	3 39-34	6	4 I	36.8	22 39.6	128.97	15	58.28
8	Di	2	2.00		26.2.1	3 39.55	7	4	9.6	22 32.8	129.04	15	58.0
9	Mi	τ	45.22	1 10	6.or	3 39-77	7	26	35.I	22 25.5	129.11	15	57.7-
10	Do	1	28.69	I 13	46.03	3 40.02	7	48	53.0	22 17.9	129.19	15	57.47
11	Fr	1.7	TO 45		_	3 40.27	+ 8			22 9.9	129.27	TE	-
			12.41	,	26.30	3 40.53	+ 8 8	11	2.9	22 1.6	1	15	57.20
	Sa		56.39			3 40.82	8	33	4.5	21 52.8	129.36	_	56.67
13	St		40.65		47.65	3 41.12		_	57.3	21 43.8	129.45	15	- '
14	Mo		25.21		28.77	3 41.43	9	-	41.1	21 34-5	129.54	_	56.41
15	Di	+0	10.09	I 32	10.20	3 41.76	9	30	15.6	21 24.8	129.04	10	50.15
16	Mi	-0	4.70	I 35	51.96	3 42.10	+ 9	59	40.4	21 14.8	129.75	15	55.89
17	D ₀	0	19.15	I 39	34.06	3 42.46	10	20	55.2	21 44	129.86	175	55.63
18	F_{Γ}	0	33.25	I 43		3 42.84	10	41	59.6	20 53.8	129.97	15	55.37
19	Sa	0	46.97	I 46	59.36		11	2	53.4	20 42.9	130.09		55.11
20	St	τ	0.28	1 50	42.61	3 43.25	11	23	36.3		130.21	15	54.85
2.1	Мо	-t	13.17	I 5.4	26.27	3 43.66	}-II	44	8.0	20 31.7	130.33	15	54.59
22	Di	I	25.63		10.36	3 44.09	12		28.1	20 20.1	130.46	_	54.33
23	Mi	1	37.6.4	2 I	_	3 44 54	12		36.4	20 8.3	130.59	15	54.07
24	Do		49.10	2 5	2.,	3 45.01		44	32.6	19 56.2	130.73		53.82
	Fr	2	0.26	,	25.40	3 45-49	13		16.4	19 43.8	130.87	15	53.56

Monats- und Jahresta	ξ	St	tern	zeit]	Mitt Län	leres Ä		. 191 oin.	3.0 Breite	Lg. Rad. v.	DIM.	Nut. in o' d\	
	76 77 78 79 80 81 82 83 84 85 86 87 88	23 23 23 23 23 23 23 0 0	37 41 45 49 53 57 1 5 9 13 17 21	40.05 36.60 33.15 29.71 26.26 22.82 19.37 15.92 12.48 9.03 5.58 2.14	356° 357 358 359	16 15 15 14 14 13 12		59 59 59 59 59 59 59 59 59 59	39.02 36.74 34.50 32.31 30.20 28.17 26.21 24.31 22.46 20.66 18.88	-	9.9979807 9.9980999 9.9982200 9.9983411 9.9984633 9.9987107 9.9988358 9.9989618 9.99988618 9.9992159 9.9993436 9.9994716	1192 1201 1211 1222 1232 1242 1251 1260 1268 1273 1277 1280	+11 +16 +19 +17 +12 + 4 - 4	-6 -3 +1 +5 +8 +9 +8 +6 +2
30 31 April 1 2 3 4 5 6 7 8	89 90 91 92 93 94 95 96 97 98	0 0 0 0 0 0 1 1 1	28 32 36 40 44 48 52 56 0 4 8	55.25 51.80 48.35 44.91 41.46 38.01 34.57 31.12 27.68 24.23 20.79	9 10 11 12 13 14 15 16 17 18 18	8 8 7 6 5 4 3 2 II 0 59	57.61 11.17 22.92 32.84 40.89 47.94 51.27 53.53 53.78 51.97 48.94	59 59 59 59 59 59 59 59 58 58	15.34 13.56 11.75 9.92 8.05 6.15 4.23 2.26 0.25 58.19 56.07 53.90	-0.60 -0.55 -0.49 -0.40 -0.29 -0.18 -0.07 +0.06 +0.18 +0.29 +0.38	9.9995996 9.9997276 9.9998554 9.9999828 0.0001098 0.0003622 0.0004874 0.0006118 0.0007353 0.0008580	1280 1280 1278 1274 1270 1265 1259 1252 1244 1235 1227	+15 +21 +23 +20 +15 - 5 - 5 - 24 -26	-8 -5 +3 +6 +8 +9 +7 +5 +1
10 11 12 13 14 15 16 17 18 19 20 21 22 23	100 101 102 103 104 105 106 107 108 109 110 111 112		20 24 28 32 35 39 43 47 51 55 59	13.89 10.45 7.00 3.56 0.11 56.66 53.22 3 49.77 46.33 42.88 39.44 9 35.99 3 32.55	21 22 23 24 25 26 27 28 29 31 32	57 56 53 53 51 49 48 47 48 47 48 47 42 44 42 44	23.07 10.24 55.13 37.74 18.07 56.16 32.07 5.88 37.66 7.50 35.48	58 58 58 58 58 58 58 58 58 58 58 58 58 5	51.69 49.44 47.17 44.89 42.61 40.33 38.09 35.91 33.81	-0.54 -0.62	0.0025219	1183 1181 1179 1178 1178 1177 1175	+ I (+ () - ()	7 -1-4 3 -7 4 -9 7 -1-4 3 +7 5 +9 7 +7 3 +3 4 -1

	nats- nd nenta	ıg	Zeitg M. Zt.	leichung — W. Zt.	Sch	ein	b. AR.	Diff.	Schein	nb.	Dekl.	Diff.	Durchg Dauer St Zt.	Ha	lbm.
		1)		11 B	-in	n					"			,	"0
A pril				49.19	2	-	39.91	3 45·49	+12		-	19 43.8	130.73		53.82
	25	Fr	2	0.26	2	-	25.40	3 45.99	13	-	16.4	19 31.0	130.87	_	53.56
		Sa		10.83		-	11.39	3 46.50	13	23	47.4	19 17.9	131.01	_	53.30
	27	St	2	20.89	2 :	16	57.89	3 47.01	13	43	5.3	19 4.5	131.15		53.05
	28	Мо	2	30.43	2 2	20	44.90	3 47.54	14	2	9.8	18 50.8	131.30	15	52.80
	29	Di	-2	39-45	2 :	24	32.44	3 48.07	+14	21	0.6	18 36.7	131.45	15	52.55
	30	Mi	2,	47-93	2 1	28	20.51	3 48.61	14	39	37.3	18 22.4	131.60	15	52.30
Mai	I	Do	2	55.87	2	32	9.12		14	57	59.7	18 7.6	131.75	15	52.06
	2	Fr	3	3.26	2 :	35	58.29	3 49.17	15	16	7.3	,	131.91	15	51.82
	3	Sa	3	10.09			48.01	3 49.72	15	33	59.8	17 52.5	132.06	15	51.58
	4	St	-3	16.37	2. 4	43	38.29	3 50.28	+15	51	36.9	17 37.1	132.22	15	51.35
	5	Мо	3	22.09			29.13	3 50.84	16	8	58.3	17 21.4	132.38	15	51.12
	6	Di	3	27.24		51		3 51.41	16	2 6	3.7	17 5.4	132.54	15	50.89
	7	Mi	3	31.83	2	55	12.51	3 51.97	16	42	52.7	16 49.0	132.70	15	50.67
	8	Do	3	35.85	2	59	5.04	3 52.53	16		24.9	16 32.2	132.87	15	50.45
	9	Fr	-3	39.31	3	2	58.13	3 53.09	+17	15	40.1	16 15.2	133.03	15	50.23
	IO	Sa	3	42.21	3	6	51.79	3 53.66	17	31	37.9	15 57.8	133.20	15	50.02
	ΙI	St	3	44.55			46.01	3 54-22	17	_	18.1	15 40.2	133.36	15	49.82
	12	Мо	3	46.33	1		40.78	3 54.77	18		40.3	15 22.2	133.53	_	49.61
	13	Di	3	47.56		-	36.11	3 55.33	18		44.3	15 4.0	133.69	15	49.41
	14	Mi	-3	48.23	3:	22	31.99	3 55.88	+18	32	29.7	14 45.4	133.86	15	49.22
	15	Do	3	48.35	3 :	26	28.43	3 56.44 3 56.99	18	46	56.3	14 26.6 14 7.6	134.02	15	49.02
	16	Fr	3	47.92	3	30	25.42		19	I	3.9		134.18	15	48.83
	17	Sa	3	46.94			22.96	3 57.54	19	14	52.1	13 48.2	134.34		48.62
	18	St	3	45.41		-	21.04	3 58.08	19	28	20.7	13 28.6	134.50	15	48.45
	19	Мо	-3	43-33	3 4	42	19.68	3 58.64	+19	41	29.6	13 8.9	134.66	15	48.27
	20	Di	3	40.70		46	18.86	3 59.18	_		18.4	12 48.8	134.81	_	48.08
	21	Mi	3	37.53			18.59	3 59.73	20	6	46.9	12 28.5	134.96	15	47.90
	22	Do	3	33.82		54	18.86	4 0.27	20	18	54.9	12 8.0	135.11	15	47.7
	23	Fr	3	29.57			19.67	4 0.81	20		42.2	11 47.3	135.26	15	47.5
	2.1	Sa	-3	24.78	4	2	21.02	4 1.35	-1-20	42	8.4	11 26.2	135.41	15	47-3
	25	St	3	19.47	4	6	22.89	4 1.87	20	53	13.4	11 5.0	135.55	15	47.20
	26	Mo	3	13.64			25.28	4 2.39	21	3	57.0	10 43.6	135.69	_	47.0
	27	Di	3	7.29			28.18	4 2.90	1	_	18.9	10 21.9	135.83	-	46.8
	28	Mi	3	0.45	' '	18	31.58	4 3.40			18.8	9 59.9	135.96	_	46.7
	29	Do	-2	53.12	4:	22	35.47	4 3.89	2I	33	56.6	9 37.8	136.09	15	46.5
	30	Fr	2	45.33			39.82	4 4.35	21	43	-	9 15.4	136.21		46.40
	31	Sa	2	37.08			44.62	4 4.80	21	52	4.9	8 52.9	136.33	_	46.2
Juni	_	St	2	0	1	34	49.87	4 5.25	22	0	35.T	8 30.2	136.45	15	46.10
		Mo	2	19.28			55.54	4 5.67	22	8		8 7.1	136.56	15	45.90

	onats und bresta		5	Ster	nzeit		Mit		Äqu. 191 Diff.	3.0 Breite	Lg. Rad. v.	Diff.	Nut in o	
April			ŀ		29.10		,	26"-0		_o."68	0.0006			
er bru	-	114	2					26,18	58 22.86		0.0026391	1167	- 4	7
	25 26	115			25.66	34		49.04	58 21.26	-0.7I		1162	+ 4	$-9 \\ -8$
				15	22.21	35		10.30	58 19.69	-0.71	0.0028720	1155	+13	6
	27 28	117		19	18.77	36		29.99	58 18.14	-0.69		1147	+20	
	40	110	4	23	15.33	37	34	48.13	58 16.61	0.63	0.0031022	1137	+22	-3
	2 9	119	2,	27	11.88	38	31	4.74	58 15.09	-0.54	0.0032159	1125	+22	+1
1	30	120	2	31	8.44	39	29	19.83	58 13.56	-0.44	0.0033284	1113	+17	+5
Mai	1	121	2,	35	4.99			33.39	58 12.04	-0.34	0.0034397	1099	+ 9	+8
	2	122	2	39	1.55	41	25	45.43	58 10.50	0.22	0.0035496	1085	- 2	+9
	3	123	2	42	58.10	42	23	55.93		-0.09	0.0036581		12	+-8
	4	124	2	46	54.66	43	22	4.87	58 8.94	+0.03	0.0037650	1069	-21	+6
	5	125	2	50	51.22			12.23	58 7.36	+0.13	0.0038702	1052	-26	+-2
	6	126		54	47.77	45		17.97	58 5.74	+0.23	0.0039737	1035	-27	-2
	7	127			44.33	46		22.05	58 4.08	+0.31	0.0040754	1017	-23	_6
	8	128	3	2		47		24.44	58 2.39	+0.35	0.0041753	999	15	_8
			_		. ,				58 0.65			981		
	9	129	3	6	37.44	48		25.09	57 58.87	+0.37	0.0042734	964	5	<u>-9</u>
	10	130	3	10	34.00	49	10	23.96	57 57.08	+0.36	0.0043698	946	+ 5	-8
	II	131	3	14	30.56	50		21.04	57 55.26	+0.32	0.0044644	931	+13	-5
	12	132	3		27.11	51	6	16.30	57 53.44	+0.24	0.0045575	915	+17	T
	13	133	3	22	23.67	52	4	9.74	57 51.62	+0.14	0.0046490	901	+17	+3
	T.1	134	3	26	20.23	53	2	1.36		+0.02	0.0047391		-1-15	+6
	15	135	3	30	16.78	53	59	51.19	57 49.83	0.11	0.0048280	889	+ 8	+8
	16	136	3	34	13.34	54	57	39.30	57 48.11	-0.26	0.0049158	878	+ I	+9
	17	137	3	38	9.90	55	55	25.76	57 46.46	-0.41	0.0050025	867	- 7	+7
	18	138	3	42	6.45	56	53	10.62	57 44.86	0.55	0.0050882	857	-13	-1-5
	T.0	-	Ť			1			57 43-35			848		
	19	139	3	46	3.01	57		53.97	57 41.93	-0.67	0.0051730	840	14	+1
	20	140	3	49	59.57	58	٠.	35.90	57 40.61	-0.76	0.0052570	830	-12	-3
	21	141	3	53	56.13	59	•	16.51	57 39.38	0.82	0.0053400	820	- 6	-7
	22	142		57	52.68	60		55.89	57 38.24	0.85	0.0054220	810	+ 2	-9
	23	143	4	I	49.24	61	4 T	34.13	57 37.17	-0.85	0.0055030	798	+10	-9
	2.1	144	4	5	45.80	62	39	11.30		0.84	0.0055828	785	+17	-7
	25	145	4	9	-	63	36	47.46	57 36.16	0.79	0.0056613		+22	-4
	26	146	4	13		64		22.65	57 35.19	-0.72	0.0057385	772	+23	0
	27	147	4	17		65	31		57 34.26	0.62	0.0058141	756	⊣-19	+-4
	28	148	4	21		66	_	30.28	57 33-37	0.52	0.0058880	739	- -I2	⊣ -7
	29	140	1	25	28.59	617		_	57 32.51		0.0059602	722	1 2	٦,
	30	149		_		67	,	2.79	57 31.67	-0.41	37	704	+ 2	+9
	31	150		-	25.15	68	21	34.46	57 30.84	-0.30	0.0060306	684	- 9	+9
$J_{\rm uni}$	31	151	4	33	21.70	69	22	5.30	57 30.02	0.18	0.0060990	663	18	+7
		152	4	37	18.26	70	19	35.32	57 29.20	-0.05	0.0061653	640	-24	+3
	2	153	14	41	14.82	71	17	4.52	1	+0.03.	0.0062293		-26	1

ti	nats- nd nentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg Dauer St Zt.	Halbm.
Juni	ı St	-2 28.39	4 34 49.87	m s 4 5.67	+22° 0′ 35.1	8 7.1	136.45	15 46.10
	2 Mo	2 19.28	4 38 55.54	4 6.07	22 8 42.2	7 44.0	136.56	15 45.96
	3 Di	2 9.77	4 43 1.61	4 6.45	22 16 26.2	7 20.7	136.67	15 45.83
	4 Mi	I 59.88	4 47 8.06	4 6.81	22 23 46.9	6 57.1	136.77	15 45.70
	5 Do	1 49.63	4 51 14.87	4 7.14	22 30 44.0	6 33.5	136.87	15 45.58
	6 Fr	—I 39.04	4 55 22.01	4 7.46	+22 37 17.5	6 9.6	т36.96	15 45.46
	7 Sa	1 28.14	4 59 29.47	4 7.74	22 43 27.1	5 45.7	137.05	15 45.34
	8 St	1 16.96	5 3 37.21	4 8.01	22 49 12.8	5 21.6	137.13	15 45.23
	9 Mo	1 5.51	5 7 45.22	4 8.25	22 54 34.4	4 57.4	137.20	15 45.13
	10 Di	0 53.82	5 11 53.47	4 8.46	22 59 31.8	4 33.1	137.27	15 45.03
	II Mi	-0 41.92	5 16 1.93	4 8.65	+23 4 4.9		137.34	15 44.94
	12 Do	0 29.82	5 20 10.58	4 8.83	23 8 13.6		137.40	15 44.85
	13 Fr	0 17.55	5 24 19.41	4 8.98	23 11 57.9	3 44.3	137.45	15 44.77
	14 Sa	5.13	5 28 28.39	4 9.12	23 15 17.6	3 19.7 2 55.2	137.49	15 44.68
	15 St	10 7.42	5 32 37.51		23 18 12.8		137.53	15 44.60
	16 Mo	+0 20.09	5 36 46.73	4 9.22	-1-23 20 43.4	2 30.6	137.56	15 44.53
	17 Di	0 32.85	5 40 56.05	4 9.32	23 22 49.2	2 5.8	137.59	15 44.46
	18 Mi	0 45.69	5 45 5.45	4 9.40	23 24 30.4	1 41.2	137.61	15 44.39
	19 Do	0 58.59	5 49 14.90	4 9-45	23 25 46.9	1 16.5	137.62	15 44.32
	20 Fr	1 11.52	5 53 24.38	4 9.48	23 26 38.6	0 51.7	137.63	15 44.26
	21 Sa	-1-I 24.46	5 57 33.88	4 9.50	+-23 27 5.6	0 27.0	137.63	15 44.20
	22 51	I 37.39	6 1 43.38	4 9.50	23 27 7.8	0 2.2	137.62	15 44.14
	23 Mo	[50.30	6 5 52.85	4 9-47	23 26 45.3	0 22.5	137.60	15 44.09
	24 Di	2 3.17	6 10 2.28	4 9.43	23 25 57.9	0 47-4	137.58	15 44.04
	25 Mi	2 15.98	6 14 11.65	4 9.37	23 24 45.8	1 12.1	137.55	15 44.00
	26 Do	-1-2 28.70	6 18 20.92	4 9-27		1 36.8		
	27 Fr	2 41.30	6 22 30.08	4 9.16	-F23 23 9.0 23 21 7.5	2 1.5	137.52	15 43.96 15 43.92
	28 Sa	2 53.76	6 26 39.10	4 9.02	23 21 7.5 23 18 41.4	2 26.1	137.43	15 43.89
	29 St	3 6.06	6 30 47.96	4 0.00	23 15 50.7	2 50.7	137.38	15 43.86
	30 Mo	3 18.18	6 34 56.64	4 8.68	23 12 35.5	3 15.2	137.32	15 43.84
Juli	ı Di	+-3 30.10	6 39 5.12		+23 8 55.8		137.25	15 43.82
	2 Mi	3 41.78	6 43 13.36		23 4 51.8	4 4.0	137.18	15 43.81
	3 100	3 53.20	6 47 21.34	4 7.98	23 0 23.5	4 20.3	137.11	15 43.80
	4 Fr	4 4.31	6 51 29.04	4 7.70	22 55 31.1	4 52·4 5 16.4	137.03	15 43.80
	5 Sa	4 15.17	6 55 36.43	4 7.05	22 50 14.7	5 40.3	136.94	15 43.81
	6 St	+4 25.67	6 59 43.48	4 6 70	+-22 44 34.4	6 4.0	136.85	15 43.82
	7 Mo	4 35.81	7 3 50.18	4 6.31	22 38 30.4	6 27.6	136.75	15 43.83
	8 Di	4 45.56	7 7 56.49	4 5.91	22 32 2.8	6 50.9	1 TOO DE	15 43.86
	9 Mi	4 54.91	7 12 2.40	1 5.48	22 25 11.9	7 14.1	136.54	15 43.89
	10 [)0	5 3.83	7 16 7.88	3	22 17 57.8	3	136.42	15 43.92

Monats- und Jahrestag	Sternzeit	Mittleres Ä	.qu. 191	3.0 Breite	Lg. Rad. v.	Din.	Nut. ((in ο".οι dλ dε
Juni 1 152 2 153 3 154 4 155 5 156 6 157 7 158 8 159 9 160 10 161 11 162 12 163 13 164	5 20 40.40	70° 19° 35.32° 71° 17° 4.52° 72° 14° 32.88° 73° 12° 0.38° 74° 9° 26.98° 75° 6° 52.64° 76° 4° 17.32° 77° 19° 41.00° 77° 59° 3.65° 78° 56° 25.26° 79° 53° 45.83° 80° 51° 5.37° 81° 48° 23.91°	57 29.20 57 28.36 57 27.50 57 26.60 57 25.66 57 24.68 57 22.65 57 21.61 57 20.57 57 19.54 57 18.54	-0.06 +0.03 +0.11 +0.16 +0.19 +0.16 +0.08 -0.01 -0.13 -0.26 -0.39 -0.52	0.0061653 0.0062931 0.0062911 0.0063505 0.0064075 0.0065141 0.0065638 0.0066111 0.006563 0.0066994 0.0067406 0.0067799	640 618 594 570 545 521 497 473 452 431 412 393	$ \begin{array}{ c c c c c }\hline & d\lambda & d\epsilon \\ \hline & -24 & +3 \\ -26 & -1 \\ \hline & -24 & -5 \\ \hline & -18 & -7 \\ \hline & -8 & -9 \\ \hline & +1 & -8 \\ \hline & +10 & -6 \\ \hline & +16 & -3 \\ \hline & +16 & +5 \\ \hline & +10 & +8 \\ \hline & +2 & +9 \\ \hline & -6 & +8 \\ \hline \end{array} $
14 165 15 166 16 167 17 168 18 169 19 170 20 171 21 172 22 173 23 174 24 175 25 176	5 28 33.52 5 32 30.08	82 45 41.52 83 42 58.28 84 40 14.26 85 37 29.53 86 34 44.19 87 31 58.33 88 29 12.05 89 26 25.44 90 23 38.58 91 20 51.53 92 18 4.35 93 15 17.10	57 17.61 57 16.76 57 15.98 57 15.27 57 14.66 57 14.14 57 13.72 57 13.39 57 13.14 57 12.95 57 12.82 57 12.75	-0.65 -0.77 -0.86 -0.93 -0.97 -0.95 -0.95 -0.96 -0.66 -0.54	0.0068175 0.0068536 0.0068882 0.0069531 0.0069835 0.0070125 0.0070400 0.0070660 0.0070903 0.0071129 0.0071338	376 361 346 331 318 304 290 275 260 243 226 209	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
26 177 178 28 179 180 30 181 Juli 1 182 2 183 3 184 4 185 5 186 6 187 7 188 8 189 9 190 10 191	6 15 52.23 6 19 48.79 6 23 45.35 6 27 41.90 6 31 38.46 6 35 35.02 6 39 31.58 6 43 28.14 6 47 24.70 6 51 21.25 6 55 17.81 6 59 14.37 7 3 10.93 7 7 7.49 7 11 4.05	103 44 40.44 104 41 53.57 105 39 6.59	57 12.74 57 12.75 57 12.80 57 12.96 57 13.06 57 13.24 57 13.27 57 13.22 57 13.22 57 13.22 57 13.22 57 13.22 57 13.25 57 13.22 57 13.22 57 13.22	-0.42 -0.30 -0.19 0.00 +0.07 +0.10 +0.07 +0.01 -0.08 -0.19 -0.32 -0.45 -0.58	0.0071527 0.0071697 0.0071846 0.0071972 0.0072275 0.0072236 0.0072237 0.0072210 0.0072157 0.007278 0.0071974 0.0071846 0.0071696	170 149 126 103 79 54 28 1 27 53 79 104 128 150	$ \begin{vmatrix} -5 & +9 \\ -15 & +7 \\ -23 & +4 \\ -26 & 0 \\ -25 & -4 \\ -20 & -7 \\ -12 & -9 \\ -2 & -9 \\ +7 & -7 \\ +13 & -4 \\ +17 & 0 \\ +16 & +4 \\ +12 & +7 \\ +4 & +9 \\ -3 & +9 \\ \end{vmatrix} $

u	nats- nd hentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR. D	om Schein	ıb. Dekl.	Diff.	Durchg,- Dauer St Zt.	Halbm.
Juli	g Mi	m s	h m s	1 1 22	25 110		136.54	15 43.89
9 (111	10 Do	1-4 54.91	/ 12 2.40	5,40	25 11.9	7 14.1	-	
	II Fr	5 3.83	7 16 7.88	5.05 [17 57.8	7 37.2	136.42	15 43.92
	1	5 12.32	7 20 12.93	4-59	10 20.6	8 0.0	136.30	15 43.96
	12 Sa	5 20.35	7 24 17.52	4.11 22	2 20.6	8 22.6	136.17	15 44.00
	13 St	5 27.91	7 28 21.63	3.63	53 58.0	8 45.0	136.04	15 44.04
	14 Mo	4-5 34.98	7 32 25.26	3.13	45 13.0	9 7-3	135.91	15 44.09
	15 Di	5 41.55	7 36 28.39	2.63	36 5.7	9 29.3	135.77	15 44.14
	16 Mi	5 47.62	7 40 31.02	2.12 21	26 36.4	9 51.2	135.63	15 44.20
	17 Do	5 53.18	7 44 33.14	1.59 21	16 45.2	10 12.7	135.49	15 44.26
	18 Fr	5 58.22	7 48 34.73	1.06	6 32.5	10 34.2	135.34	15 44.32
	19 Sa	+6 2.72	7 52 35.79	1-20	55 58.3		135.19	15 44.39
	20 St	6 6.68	7 56 36.31	0.52	45 2.9	10 55.4	135.04	15 44.46
	21 Mo	6 10.10	8 0 36.20 3	59.98 20	33 46.6	_	134.88	15 44.53
	22 Di	6 12.98	IX 4 25 72 1	59.44 20	22 9.6	11 37.0	134.72	15 44.60
	23 Mi	6 15.31	1 8 8 34.01	58.88	10 12.0	11 57.6	134.56	15 44.68
	24 Do	+6 17.08	1 X TO 00 00	58.32	57 54.1	12 17.9	134.40	15 44.76
	25 Fr	6 18.28		57.70	45 16.2	12 37.9	134.23	15 44.85
	26 Sa	6 18.90	8 20 27 87 3	5/.10		12 57.7	134.06	15 44 94
	27 St	6 18.95	8 24 24 48 3	56.61 19		13 17.2	133.89	15 45.03
	28 Mo	6 18.42	8 28 20.51	56.03	5 24.8	13 36.5	133.72	15 45.13
	29 Di	+6 17.31	1 8 02 TF 06	55.45	51 29.3	13 55.5	122 55	15 45.23
	30 Mi	6 15.62	8 36 10.82	54.86	, , ,	14 14.3	133.55	15 45.34
	31 Do	6 13.33	8 40 508 3	54.20	٥.	14 32.7		15 45.45
Aug	9	6 10.44	1 3	53.67 18	_	14 50.8	133.20	
21 (15)	2 Sa	6 6.95	8 43 58.75 8 47 51.82	53.07	1 3 3	15 8.7	133.03	15 45.57
			3	52.47		15 26.2		15 45.70
	3 St		8 51 44.29	$_{51.85}$ + 17	٥.	15 43.5	132.69	15 45.83
	4 Mo	5 58.16	8 55 30.14	51.24 17	21 33.1	16 0.4	132.51	15 45.96
	5 Di	5 52.85	8 59 27.38	50.63		16 16.9		15 46.10
	6 Mi	5 46.92	9 3 18.01	50.02	49 15.8	16 33.1	132.16	15 46.24
	7 Do	5 40.38	9 7 8.03	49.40	32 42.7	16 49.1	131.99	15 46.39
	8 Fr	+5 33.22	0 TO 57 42	48.79 +16	15 53.6		121.82	15 46.55
	9 Sa	5 25.46		48.20	58 48.9	17 4.7	1 T2 T.05	15 46.71
	10 St	5 17.10	1 0 18 24.42	40.20	41 28.9	1 '	LT2T.4X	15 46.87
	II Mo	1)	0 22 22 02	47.61		17 34.9	1 121 21	15 47.03
	12 Di	4 58.61	9 26 9.05	4/.02		17 49.0	131.15	15 47.20
	13 Mi	+4 48.50	0 00 55 10	46.44	48 0.3		T20.00	15 47.37
	14 Do	4 37.83	0 33 41.37	45.00	29 42.2	10 10.	T00 80	15 47.5
	15 Fr	4 26.60	0 27 26 70 3	45-33 T		18 31.0	T20 67	4
	16 Sa	4 14.84	0 41 11.50	44.80		10 45.4	T20.52	15 47.90
	17 St	4 2.56	9 44 55.77	44.2/	3 33 26.3	10 50.0	130.37	15 48.08

M	onats	_	ı			7	LT;++		iqu. 191	militag	· 		Nut.	((
	und iresta	1	8	Ster	nzeit	1	Län,	reres r	Diff.	Breite	Lg. Rad. v.	Diff.	in o".	.01
- 340	11.681	ığ.	_	_		-		ь.	27	1			dλ	de
Juli	9	190	7	7	7.49	T06°	26	19.49		-0.45	0.0071846		+ 4	9
	10	191	7		4.05			32.28	57 12.79	-0.58	0.0071696	150	- 3	+9
	II	192	7	15	0.61			44.96	57 12.68	-0.70	0.0071524	172	-10	+7
	12	193	7	18	57.16			57.57	57 12.61	-0.82	0.0071333	191	-14	,
	13	194	7	22	53.72			10.18	57 12.61	0.91	0.0071124	209	-14	+3 -1
								_	57 12.67			226	7-4	
	1.4	195	7	26	50.28			22.85	57 12.80	-0.97	0.0070898	242	10	-5
	15	196	7	-	46.84			35.65	57 13.01	-1.00	0.0070656	257	- 3	-7
	16	197	7		43.40	113	16	48.66	57 13.31	-1.01	0.0070399	271	+ 5	<u>-9</u>
	17	198	7	38	39.95	114		1.97	57 13.71	-0.98	0.0070128	286	+13	-8
	18	199	7	42	36.51	115	11	15.68		-0.93	0.0069842		+20	6
	19	200	7	46	33.07	116	8	29.87	57 14.19	_o.86	0.0069542	300	+-24	-2
	20	201	7	50	-	117		44.62	57 14.75	-0.77	0.0069227	315	+23	$+\mathbf{r}$
	21	202		54	26.19	118	3	0.00	57 15.38	-0.66	0.0068897	330	-1-17	- -5
	22	203	7		22.74	119		16.09	57 16.09	-0.54	0.0068552	345	+ 9	+8
	23	204	8	2	19.30	119	57	32.95	57 16.86	-0.40	0.0068191	361	- 2	+9
		·	1						57 17.70	1		377		_
	2.1	205	8	6	15.86	120	-	50.65	57 18.59	-0.27	0.0067814	395	—12	+8
	25	206	8	10	12.41	121	-	9.24	57 19.53	0.16	0.0067419	413	-20	+-6
	26	207	8	14	8.97	122	٠.,	28.77	57 20.51	0.06	0.0067006	432	25	+-2
	27	208	8	18	5.53	1		49.28	57 21.52	+0.02	0.0066574	452	-26	-2
	28	209	8	22	2.09	124	44	10.80	57 22.56	+0.09	0.0066122	474	-2.2	-6
	29	210	8	25	58.64	125	41	33.36		0.13	0.0065648	496	-15	8
	30	211	8	29	55.20	126			57 23.59	+0.14	0.0065152		6	-9
	31	212	8	33	51.76	127	36	21.58	57 24.63	+0.11	0.0064633	519	-1-4	8
Aug.	I	213	8	37	48.31	128	33	47.23	57 25.65 57 26.63	+0.05	0.0064090	543 568	12	- 5
	2	214	8	41	44.87			13.86		-0.02	0.0063522		+16	I
	2	215	8	45	41.42		_	41.42	57 27.56	-0.12	0.0062929	593	1.76	
	3	216	8		41.43	131	_	9.86	57 28.44	-0.12	0.0062311	618	+10	+3
	4	217	8		37.98			-	57 29.26	1 -	0.0002311	642	+13 + 6	+8
	5	218	8	53		_	-	39.12	57 30.04	-0.39	0.0061005	664	— I	1.
			1	57	31.10	133	2I	9.16	57 30.82	-0.52	0.0001003	686	_ 8	+9
	7	219	9	1	27.65	134	10	39.98	57 31.60	-0.65		706	- 0	+7
	8	220	9	5	24.21	135	16	11.58	57 32.39	-0.77	0.0059613	724	-13	+4
	9	221	9	9	20.77	136	13	43.97	57 33.20	0.86	0.0058889	741	-14	С
	10	222	9	13	17.32	137	11	17.17	57 34.05	-0.93	0.0058148	756	-13	4
	11	223	9	17	13.88	138	8	51.22		-0.97	0.0057392	1	- 6	-7
	12	224	9	21	10.43	139	6	26.20	57 34.98	-0.97	0.0056622	770	+ 2	9
	13	225	0	25	6.99	140	4	2.16	57 35.96	-0.95	0.0055839	783	+10	-9
	14	226	9	_	3.54	141	4 I	39.18	57 37.02	-0.90	0.0055045	794	+19	-7
	15	227	9	-	0.10	141		17.33	57 38.15	-0.82	0.0054240	805		4
	16	228	9	-		141			57 39.36			816	+24	4
	17	229	-	_	-	1	-	56.69	57 40.65	-0.72 -0.61	0.0053424	826	+24	1
	-/	429	9	40	53.21	1 143	54	37.34		1-0.01	0.0052598		+20	+4

Monats- und Wochenta	~	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg Dauer StZt.	Halbm.
woenenta	× 1		1		1		St Zt.	
Aug. 16	Sa	-1-4 14.84	9 41 11.50	111 8	+13°52′24.9	1 0	130.52	15 47.90
	St	4 2.56	9 44 55 77	3 44.27	13 33 26.3	18 58.6	130.37	15 48.08
/	Мо	3 49.76	9 48 39.53	3 43.76	13 14 14.8	19 11.5	130.22	15 48.26
	Di	3 36.47	9 52 22 79	3 43.26	12 54 50.6	19 24.2	130.07	15 48.45
	Mi	3 22.69	9 56 5.57	3 42.78	12 35 14.1	19 36.5	129.93	15 48.63
2.1	Do	+3 8.44	9 59 47.88	3 42.31	+12 15 25.6	19 48.5	129.79	15 48.82
22	\mathbf{F}_{Γ}	2 53.74	10 3 29.73	3 41.85	11 55 25.4	20 0.2	129.65	15 49.01
23	Sa	2 38.60	10 7 11.14	3 41.41	11 35 13.7	20 11.7	129.52	15 49.21
_	St	2 23.03	10 10 52.13	3 40.99	11 14 50.9	20 22.8	129.39	15 49.41
, 1	Мо	2 7.05	10 14 32.70	3 40.57	10 54 17.3	20 33.6	129.27	15 49.61
26	Di	+1 50.68	10 18 12.88	3 40.18	-1-10 33 33.1	20 44.2	129.15	15 49.81
	Mi	1 33.92	10 21 52.68	3 39.80	10 12 38.8	20 54.3	129.03	15 50.02
	Do	1 16.79	10 25 32.11	3 39-43	9 51 34.6	21 4.2	128.92	15 50.23
29	Εr	0 59.31	10 29 11.18	3 39.07	9 30 20.8	21 13.8	128.81	15 50.44
-	Sa	0 41.49	10 32 49.91	3 38.73	9 8 57.9	21 22.9	128.71	15 50.66
31	~t	-Fo 23.33	10 36 28.31	3 38.40	+ 8 47 26.2	21 31.7	128.61	15 50.88
(1)	Мо	+0 4.85	10 40 6.39	3 38.08	8 25 46.0	21 40.2	128.52	15 51.11
-	Di	-0 13.93	10 43 44.16	3 37.77	8 3 57.6	21 48.4	128.43	15 51.34
3	Mi	0 33.00	10 47 21.64	3 37-48	7 42, 1.4	21 56.2	128.35	15 51.57
	Do	0 52.36	10 50 58.84	3 37.20	7 19 57.9	22 3.5	128.27	15 51.81
5 1	Fr	-I II.99	10 54 35.76	3 36.92	1- 6 57 47.3	22 10.6	128.20	15 52.05
2	Sa	I 31.87	10 58 12.44	3 36.68	6 35 30.0	22 17.3	128.13	15 52.30
	$_{ m St}$	1 51.98	11 1 48.89	3 36.45	6 13 6.4	22 23.6	128.07	15 52.54
	Mo	2 12.31	11 5 25.11	3 36.22	5 50 36.7	22 29.7	128.02	15 52.79
9	Di	2 32.83	11 9 1.14	3 36.03	5 28 1.3	22 35.4	127.97	15 53.04
IO	Mi	-2 53.52	11 12 37.00	3 35.86	+ 5 5 20.5	22 40.8	127.93	15 53.30
11	Do	3 14.37	11 16 12.70	3 35.70	4 42 34.6	22 45.9	127.80	15 53.55
12	Fr	3 35.36	11 19 48.27	3 35.57	4 19 43.9	22 50.7	127.86	15 53.81
13	Sa	3 56.46	11 23 23.72	3 35.45	3 56 48.8	22 55.1	127.83	15 54.06
148	St	4 17.65	11 26 59.09	3 35.37	3 33 49.5	22 59.3	127.81	15 54.32
15	Мо	-4 38.90	11 30 34.39	3 35.30	+ 3 10 46.4	23 3.1	127.79	15 54.58
-/	Di	5 0.19	11 34 9.65	3 35.26	2 47 39.7	23 6.7	127.78	15 54.83
17	Mi	5 21.51	11 37 44.88	3 35.23	2 24 29.8	23 9.9	127.78	15 55.09
181	Do	5 42.83	11 41 20.11	3 35.23	2 1 16.9	23 12.9	127.78	15 55.35
19	Fr	6 4.13	11 44 55.37	3 35.26	1 38 1.4	23 15.5	127.79	15 55.61
20 8	Sa	-6 25.38	11 48 30.68	3 35.31	+ I I4 43.6	23 17.8	127.80	15 55.87
	St	6 46.56	11 52 6.05	3 35.37	0 51 23.9	23 19.7	127.82	15 56.13
1	Мо	7 7.65	11 55 41.51	3 35.46	0 28 2.5	23 21.4	127.84	15 56.39
	Di	7 28.63	11 59 17.09	3 35.58	+ 0 4 39.7	23 22.8	127.87	15 56.66
24	Mi	7 49.47	12 2 52.80	3 35.71	- o 18 44.1	23 23.8	127.91	15 56.92

	nnts		- 0				Mitt	leres Ä	.qu. 191	3.0	T 12 1		Nut.	
Jah	ınd rest:	ıg	0	tern	zeit		Län		1) in.	Breite	Lg. Rad. v.	Diff.	in ο"	.01 de
Aug.	16	228	9"	36	56.66	142	56	56.69	rr 40.6r	-0.72	0.0053424	826	+-24	0
	17	229	9		53.21			37.34	57 40.65	0.61	0.0052598	836	+-20	+4
	18	230	9		49.77		-	19.35	57 42.01	0.48	0.0051762	847	-13	-1-7
	19	231	9	48	46.32	145	50	2.79	57 43.44	0.35	0.0050915		2	
	20	232	9		42.88			47.74	57 44.95	0.21	0.0050058	857	_ 8	+8
-	21	233	9	56	39.43	147		34.25	57 46.51	-0.08	0.0049190	868	-18	1.6
	22		10	0	0,				57 48.14			879		
	23	234	IO		35.99			22.39	57 49.82	+0.03	0.0048311	890	-24 -26	-
	-	235			32.54			12.21	57 51.55	+0.12	0.0047421	902		— I
	24	236	10		29.10	150	39	3.76	57 53-32	+0.19	0.0046519	916	-23	
	25	237	10	12	25.65	171	30	57.08	57 55.12		0.0045603	930	-18	-8
	26	238			22.21	152	34	52.20	57 56.94	+0.26	0.0044673	945	- 9	-9
	27	239	10	20	18.76	153	32	49.14	57 58.77	+0.25	0.0043728	961	1	8
	28	240	10	24	15.32	154	30	47.91	58 0.58	+0.21	0.0042767	978	+ 9	6
	29	241	10	28	11.87	155	2 8	48.49	58 2.37	+0.13	0.0041789	996	+15	-2
	30	242	10	32	8.42	156	26	50.86		+0.03	0.0040793		-1-17	
	31	243	10	36	4.98	157	2.1	54.97	58 4.11	-0.09	0.0039778	1015		5
Sept.	1	244		40	1.53	158	23	0.76	58 5.79	-0.21	0.0038745	1033	+ 9	0
	2	245			58.09	159	21	8.17	58 7-41	-0.35	0.0037693	1052	+ I	
	3	24 6	10	47	54.64	22		17.14	58 8.97	0.48	0.0036623	1070	- 6	
	4	247		51	51.20			27.62	58 10.48	-0.60	0.0035536	1087	12	
			10	5-	51.20				58 11.96		0.0033330	1102	12	,)
	5	248	10	55	47.75	162	15	39.58	58 13.41	-0.70	0.0034434	1115	-15	+2
	6	249		59				52.99	58 14.87	-0.78	0.0033319	1127	11	
	7	250	11	3	40.86	164		7.86	58 16.34	-0.82	0.0032192	1137	— 8	
	8	251	11	7	37.42	165		2.1.20	58 17.85	-0.84	0.0031055	1145	- 1	8
	9	252	11	11	33.97	166	8	42.05	58 19.41	-0.82	0.0029910	1152	-+ 8	-9
	10	253	11	15	30.52	167	7	1.46		0.77	0.0028758		+16	-8
	11	254	1	_	27.07	168		22.47	58 21.01	-0.70	0.0027500	1158	- -20	1
	12		1	-	23.63	169	3	45.13	58 22.66	0.60	0.0026437	1163	-1-24	1
	13	256	1	27		170	2	9.50	58 24.37	-0.49	0.0025271	1166	+22	
	14	257			16.74	171	0		58 26.14	-0.36	0.0024101	1170	+16	1 1
								55 .	58 27.97			1172		
	15 16	258	II	35	13.29	171	59	3.61	58 29.87	-0.22	0.0022929	1174	+ 7	
		259	II	39	9.84	172	57		58 31.83	-0.08	0.0021755	1176	- 3	1
	17 18	260		43	6.40	173	56	5.31	58 33 84	+0.04	0.0020579	1178	-15	
		261	•	47	2.95	174			58 35.90	+0.16	0.0019401	1179	22	
	19	262	II	50		175	53	15.05	58 38.02	+0.27	0.0018222	1182	-25	0
	20	263	11	54		176	51	53.07		+0.35	0.0017040	1184	-25	-4
	21	264	11	58		177			58 40.19	+0.42	0.0015856	1187	20	-7
	22	265	12			178	49		58 42.41	+0.45	0.0014669	1190	-12	-9
	23	266	12	6	45.72	179	48		58 44.67	+0.46	0.0013479		- 3	
	24	267	12	IO	42.27	180		47.28	58 46.94	+0.43	0.0012284	1195	+ 7	1

	nats- nd rent/	ıg	Zeitgl M. Zt.	eichung — W. Zt.	Sch	ein	b. AR.	Diff.	Sche	inb	. Dekl.	Diff.	Durchg,- Dauer St Zt.	Н	dbm.
Sont	20	Di		28.63	h	7.0	8 TT-00	m ø		0	4 40		TOP 0-		-6"66
Sept.	-	E.U.		_	II	"	17.09	3 35.71	+		39.7	23 23.8	127.87		56.66
	2-1	Mi	7	49.47	12		52.80	3 35.87	- 0			23 24.4	127.91	-	56.92
	25	Do	8	10.16	12		28.67	3 36.04	0		_	23 24.7	127.95	15	57.18
	26	Fr	8	30.67	12	10	4.71	3 36.23	1		33.2	23 24.7	128.00		57.45
	27	Sa	8	50.99	12	13	40.94	3 36.45	3	28		23 24.3	128.06	15	57.72
	28	St	- 9	II.IO			17.39	3 36.68		_	2 22.2	23 23.4	128.12	15	57.99
	29	Mo	9	30.97			54.07	3 36.92	2			23 22.3	128.19	15	58.26
Okt.	30	Di .	9	50.60		_	30.99	3 37.18	2	-		23 20.6	128.27	15	58.53
OKI.	1	Mi	10	9.98	12	28	8.17	3 37-45	3		2 28.5	23 18.7	128.35	15	58.81
	2	Do	10	,	12	31	45.62	3 37.75	3	2	47.2	23 16.3	128.44	15	59.09
	3	Fr	IO	47.88	12	35	23.37	3 38.c6	- 3	49	3.5	23 13.6	128.53	15	59-37
	4	Sa	11	6.38	12	39	1.43	3 38.38	4	12	17.1	23 10.4	128.63	15	59.65
	5	St	II	24.55	12	42	39.81	3 38.73	4		27.5	23 7.0	128.74	15	59.93
	6	Мо	11	42.38	12	46	18.54	3 39.09	4	ļ 58	34.5	23 3.1	128.85	16	0.21
	7	Di	11	59.84	12	49	57.63		5	2	37.6	22 58.8	128.96	16	0.50
	8	Mi	-12	16.91	12	53	37.11	3 39.48	- 5	44	36.4		129.08	16	0.78
	9	Do	12	33-57	12	57	17.00	3 39.89 3 40.31	6		7 30.7	22 54.3	129.21	16	1.06
	10	Fr	12	49.81	13	0	57.31	3 40.31 3 40.76	ϵ	30	20.1	22 49.4	129.34	16	1.34
	11	Sa	13	5.61	13	4	38.07		6	5:	3 4.2	22 44.1 22 38.4	129.48	16	1.62
	12	St	13	20.94	13	8	19.30	3 41.23	7	1	42.6		129.62	16	1.90
	13	Mo	-13	35.78	13	12	1.02	3 41.72	- 7	38	3 15.1	22 32.5	129.77	16	2.18
	14	Di	13	50.10	13	15	43.25	3 42.23 3 42.76	8		41.2	22 19.4	129.92	16	2.46
	15	Mi	14	3.89	13	19	26.01		8	2:	0.6	22 12.4	130.08	16	2.73
	16	Do	14	17.13	13	23	9.32	3 43.31	8	4	13.0		130.24	16	3.00
	17	Fr	14	29.80	13	26	53.21	3 43.89	9	, ,	7 18.0	,	130.41	16	3.27
	18	Sa	—14	41.87	13	30	37.70	3 44-49	— 0	20	15.2	21 57.2	130.58	16	3.54
	19	St	14	53.33	13	34	22.80	3 45.10	ç	5:	_	21 49.1	130.76	16	3.81
	20	Mo	15	4.15	13	38	8.53	3 45.73	10	-	44.8	21 40.5	130.94	16	4.08
	21	Di	15	14.32	13	41	54.91	3 46.38	10	3	16.5	21 31.7	131.13	16	4-34
	22	Mi	15	23.82	13		41.97	3 47.06	10	_	0		131.32	16	4.60
	23	Do	15	32.63	13	49	29.72	3 47.75	-13	16	5 51.7	21 12.8	131.52	16	4.86
	24	Fr	15	40.73	13	53	18.16	3 48.44	11		٠.	21 2.7	131.72	16	5.12
	25	Sa	15	48.12	13	57	7.33	3 49.17	11		3 46.6	20 52.2	131.93	16	5.38
	26	St	15	54.78	14		57.23	3 49.90	12	-		20 41.3	132.14	16	5.63
	27	Mo	16	0.70	14		47.87	3 50.64	12	-		20 30.0	132.35	16	5.89
	28	Di	-16	5.86	14	8	39.26	3 51.39	-12	(16.2	20 18.3	132.57	16	6.15
	29	Mi	16	10.26	14		31.41	3 52.15	12	,	22.3	20 6.1	132.79	16	6.40
	-	Do	16	13.90	14	-	24.33	3 52.92	13		15.8	19 53.5	133.01	16	6.66
	31	Fr	16	16.76	14		18.02	3 53.69	12		-	19 40.4	133.23	16	6.91
Nov.	_	Sa	16	18.85			12.49	3 54.47	_	-	23.1	19 26.9	133.46	16	7.17

				M1	ttlere	r Ber	liner	Mittag			
	nats-	S	ternz	oit	Mit	tleres I	iqu. 19	13.0	Lg. Rad. v.	Diff.	Nut. ((in 0".01
	ind restag	15	LCI IIZ	2016	La	ige	Diff	Breite	ng. Hatt. v.	Din.	dh de
0	1	h	71)	.	_						
Sept.	23 266	12	6	45.72	179°48	0.34	58 46.94	+0.46	0.0013479	1195	-3 - 9
	24 267	12	10 4	42.27	180 46	47.28	58 49.23	+0.43	0.0012284	1201	+7 - 7
	25 268	12	14 3	38.82	181 45	36.51	58 51.51	+0.36	0.0011083	1207	+14 - 4
	26 269	12	18	35.38	182 44	28.02		+0.27	0.0009876	'	+16 0
	27 270	12	22	31.93	183 43	21.79	58 53.77	+0.16	0.0008661	1215	+15 +4
							58 55.99			1223	
	28 271			28.49	184 42	, ,	58 58.14	+0.03	0.0007438	1232	+11+7
	29 272			25.04	185 41		59 0.23	-0.10	0.0006206	1242	+ 3 + 9
ŌL.	30 273			21.59	186 40		59 2.24	-0.23	0.0004964	1251	- 4+8
Okt.	1 274			18.15	187 39		59 4.19	-0.35	0.0003713	1259	11 +6
	2 275	12	42	14.70	188 38	22.58		-0.45	0.0002454	1267	-15 + 3
	3 276	12	46	11.25	189 37	28.65	,	-0.54	0.0001187		-15 - 1
	4 277	12	50	7.81		36.54	59 7.89	-0.60	9.9999914	1273	-11 - 5
	5 278	12	54	4.36	_	46.20	59 9.66	-0.62	9.9998638	1276	- 3 - 8
	6.279	12	58	0.92		57.61	59 11.41	-0.63	9.9997359	1279	
	7 280	13	-	57.47			59 13.16	-0.59	9.9996079	1280	+5-9 +14-8
		13		3/.4/	193 34	10.77	59 14.93	-0.59		1278	114
	8 281	13	5	54.02	194 33	3 25.70	59 16.71	-0.52	9.9994801	1276	+21 -6
	9 282	13	9	50.58	195 32	42.41	59 18.53	1 - 0 12	9.9993525	1272	+25-2
	10 283	13	13	47.13	196 32	0.94	59 20.37	1 0.22	9.9992253	1268	+21+2
	11 284	13	17	43.69	197 31	21.31		O.2.T	9.9990985	1262	185
	12 285	13	21	40.24	198 30	43.55	59 22.24	-0.08	9.9989723		+10+8
		1.0	0.5	36.80			59 24.15	1006	9.9988469	1254	7 10
	13 286	13		-	199 30		59 26.10			1247	- 1+9
	14 287	13		33.35		33.80	59 28.09	+0.19	9.9987222	1239	11 +-8
	15 288	13		29.90	201 20		59 30-12	+0.32	9.9985983	1229	-19-1-9
	16 289	13		26.46	202 2	5	59 32.23	+0.44	9.9984754	1221	-25 + 2
	17 290	13	41	23.01	203 28	3 4.26	59 34-36	+0.53	9.9983533	1211	—26 —2
	18 291	13	45	19.57	204 2	7 38.62		1060	9.9982322	1202	-21(
	19 292	13		16.12		7 15.16	59 36.5.	- O D2	9.9981120		-158
	20 293		.,	12.68	1 -	5 53.93	59 38.7	+0.64		1193	-5-9
	21 294			9.23		5 34.96	59 41.0	+0.62	9.9978742	1103	+ 4 -8
	22 295	14		5.79		5 18.25	59 43.29	+0.57	9.9977565	1177	+11 -0
						-	59 45.5	7		1171	
	23 296	14	-	2.34	209 2	_		+-0.50		1105	+15 -
	24 297	14		58.90		5 51.67	59 50.1	+0.40	1	1160	+15+
	25 298	14	12	55.45	211 2	5 41.78	59 52.3	-1 + 0.20	9.9974069	1157	+12+
	26 299			52.01	212 2	5 34.12	59 54.5	4-0.15	9.9972912	1154	
	27 300	14	20	48.56	213 2	5 28.63		O O2	9.9971758		I - 2 +
	28 301	T.4	2.1	45 TO	274.2	r 25 25	59 56.6		9.9970606	1152	TO
				45.12		5 25.25	50 50.0	1 1			
	29 302			41.67		5 23.89		-0.20	1 / / / /		-14+
	30 303			38.23		5 24.45		-0.29			-15 -
Nov.	31 304			34.78		5 26.84	00 4.1	-0.36	1	3 3 4 4	13 -
~10V,	1 305	1.	40	31.34	218 2	5 30.97		-0.39	9.9966017	7	- 7 -

	nats- nd renta		Zeitgl M. Zt	eichung — W.Zt.	Sch	ein	b. AR.	Diff.	Schei	nb.]	Dekl.	Diff.	Durchg Daner St Zt.	На	dbm.
Okt.	31	Fr	-16 ⁿ	"16.̈76	14	20"	18.02	m a	— T2	50	56.2	1 1	133.23	16	6.91
Nov.	I	Sa		18.85		24		3 54.47			23.I	19 26.9	133.46	16	7.17
	2,	St		20.15	14	28	7.74	3 55.25		-	3 6. I	19 13.0	133.69	16	7.42
	3	Мо	_	20.67	14	32	3.78	3 56.04		57	- 0	18 58.7	133.92	16	7.67
	4	Di		20.39	14	-	0.62	3 56.84		-	18.7	18 43.9	134.15	16	7.92
	5	Mi	—16	19.30	14	39	58.27	3 57.65	-15	34	47.5	18 28.8	134-39	16	8.17
	6	Do		17.40		43	56.72	3 58.45	15	53	0.8	18 13.3	134.63	16	8.42
	7	Fr	16	14.69		47		3 59.26	-	-	58.1	17 57-3	134.86	16	8.66
		Sa		11.16			56.07	4 0.09	_	28	39.1	17 41.0	135.10	16	8.90
	9	St	16	6.80	14	-	56.99	4 0.92		46	3.3	17 24.2	135.34	16	9.14
	10	Мо	-16	1.61	14	59	58.74	4 1.75	-17	3	10.4	17 7.1	135.57	16	9.38
	11	Di	15	55.58	15	4	1.32	4 2.58	,	20	0.1	16 49.7	135.81	16	9.61
	12	Mi		48.71	15	8	4.75	4 3.43	17		31.9	16 31.8	136.05	16	9.83
	13	Do		41.00	15	12	9.02	4 4.27	17		45.4	16 13.5	136.29	16	10.05
	14	Fr	15	32.44	15	16	14.13	4 5.11	18		40.2	15 54.8	136.53	16	10.27
	15	Sn	- 15	23.03	15	20	20.10	4 5.97	-18	24	16.0	15 35.8	136.76	16	10.48
	16	St	15	12.77	1 -		26.91	4 6.81	18		32.5	15 16.5	137.00		10.69
	17	Мо	15	1.66	15		_	4 7.66	18	•	29.3	14 56.8	137.24		10.90
	18	Di		49.71	15		43.09	4 8.52	19	9	5.9	14 36.6	137.47		11.10
	19	Mi	14	36.91	15		52.45	4 9 36	-	23		14 16.1	137.70	16	11.29
	20	Do	-14	23.27	15	41	2.65	4 10.20	19	37	17.2	13 55.2	137.92	16	11.49
	21	Fr	14	8.79	15	45	13.69	4 11.04	19		51.2	13 34 0	138.14		11.68
	22	Sa	13	53.48		49		4 11.87	20	4	3.6	13 12.4	138.36		11.86
	23	St	13	37-35	15	53		4 12.68		16	-	12 50.4	138.58	16	12.04
	24	Mo	_	20.42	15		51.73	4 13.49	20		22.0	12 28.0	138.79	16	12.22
	25	Di	-13	2.70	15	2	6.01	4 14.28	-20	41	27.2	12 5.2	139.00	16	12.40
	26	Mi		44.20	16	6	21.06	4 15.05	20	53	9.3	11 42.1	T20 20		12.57
	27	Do	1	24.95	16	10	36.87	4 15.81	21		27.9	11 18.6	139.40	-	12.74
	28	Fr	12	4.97	16		53.41	4 16.54	2.1		22.8	10 54.9	139.60	1	12.91
	29	Sa	11	44.28	16	19	10.66	4 17.25	21	25		10 30.7	130.70	16	13.07
	30	St	11	22.91	16	23	28.59	4 17.93	_ 2 T	35	59.8	10 6.3	139.98	16	13.23
Dez.	I	Mo	11	. 0.87	16		47.18	4 18.59	2.1		41.3	9 41.5	140.16		13.39
-	2	Di	10	0	16	32	. ,	4 19.23	2.1		57.8	9 16.5	T40.24	- 40	13.5
	3	Mi	10		16		26.26	4 19.85	2.2.	3	0	8 51.1	TAGET		13.70
	4	Do	9		16		46.70	4 20.44	22	12		8 25.5	140.67		13.8
	5	Fr	- 9		16	45	7.71	4 21.01	-22	20		7 59-7	140.82		14.00
	6		9		16		29.25	4 21.54	22		47.7	7 33.6	140.98	1 2	14.14
	7	1200	8		16		, ,	4 22.06	2.2.			7 7.3	TAT 12		14.28
	8	1	8	10.11	16))	13.86	4 22.55	22	,	35.8	6 40.8	141 25	16	
	9		7		17	2		4 23.01	22		49.8	6 14.0	141.38	1000	14.5

Mittlerer Berliner Mittag.													
u	nats- nd resta		S	tern	zeit		Mittl Läng		.qu. 191 bis.	3.0 Breite	Lg. Rad. v.	Diff.	Nut. ((in 0".01 dλ dε
Ōkt.	31	304	T.1	26 ⁿ	34.78	217	25	26.84		_o.̈36	9.9967160		-13 -4
Nov.	1	305			31.34			30.97	60 4.13	-0.39	9.9966017	1143	- 7 - 7
	2	306			27.89			36.78	60 5.81	-0.39	9.9964879	1138	+ 2 -9
	3	307			24.45		_	44.20	60 7.42 60 8.99	-0.36	9.9963746	1133	+12 -9
	4	308			21.01			53.19		-0.31	9.9962621	1125	+19 -7
	5	309	T.4	56	17.56	222		3.72	60 10.53	-0.23	9.9961506	1115	+24 -4
	6	310	15	_	14.12	223		15.77	60 12.05	-0.12	9.9960402	1104	+21 €
	7	311	15		10.68		26	29.34	60 13.57	0.00	9.9959310	1092	+21 + 2
	8	312	15	8	7.23			44.42	60 15.08	+0.12	9.9958231	1079	+14+7
	9	313	15	12	3.79	226		1.02	60 16.60	+0.25	9.9957167	1064	+ 3 +9
					•				60 18.14			1048	7+8
	10	314	15	16	0.31 56.90	228		19.16	60 19.68	+0.39	9.9956119 9.9955087	1032	-17+6
	12	315	15	23	53.46	229		0.06	60 21.22	+0.52 +0.62	9.9954074	1013	
	13	317	15		50.02			22.85	60 22.79	+0.71	9.9953080	994	-23 + 1
	14	318	15		46.57			47.26	60 24.41	+0.78	9.9952105	975	-23
	ex.					_			60 26.06			955	
	15	319			43.13			13.32	60 27.74	+0.83	9.9951150	935	-17 -
	16	320	15		39.69			41.06	60 29.45	+0.86	9.9950215	915	- 8 -
	17	321			36.24	_	_	10.51	60 31.19	+0.85	9.9949300	896	+ 1 -
	18	322		47				41.70	60 32.97	+0.80	9.9948404	877	+9-
	19	323	15	51	29.35	230	31	14.67	60 34.75	+0.73	9.9947527	858	+15 -
	20	324	15	55	25.92	237	31	49.42	60 36.52	+0.64	9.9946669	841	+16+
	21	325	15		22.47	238		25.94	60 38.27	+0.53	9.9945828	826	+13+
	22	326	16	3	19.03	239	-	4.21	60 40.00	+0.41	9.9945002	811	+ 8 +
	23	327	10		15.59			44.21	60 41.67	+0.28	9.9944191	797	0+
	2.1	328	16	11	12.15	241	34	25.88	60 43.27	+0.15	9-9943394	784	-7+
	25	329	16	15	8.70	242	35	9.15	60 44.80	+0.04	9.9942610		-13 +
	2 6	330	16	19		2 3		53.95	60 46.23	-0.05	9.9941837	773 761	-16+
	27	331	16	23	1.82	244	36	40.18	60 47.56	-0.12	9.9941076	750	-15
	2 8	332	16	2 6	58.38	245	37	27.74	60 48.78	-0.16	9.9940326	738	- 9 -
	2 9	333	16	30	54.94	246	38	16.52		-0.17	9.9939588	726	0
_	30	334	16	3.1	51.50	247	39	6.43	60 49.91	-0.15	9.9938862	1	+ 9 -
Dez.	I	335			48.05	248	-	57.37	60 50.94	-0.10	9.9938149	713	1 78
	2	336		_	44.61			49.25	60 51.88	-0.02	9.9937451	090	+23 -
	3	337			41.17	1		42.02	60 52.77	1008	9.9936768	1 003	1.05
	4				37.73			35.63	60 53.61	-1-0.10	9.9936102		1-22 -
	5	339	16	54	34.29	252	43	30.05	60 54.42	1 + 0.21	9.9935454		1 729 1
	6			58				25.24	60 55.19	+0.12	9.9934826		1
	7		17		27.41			21.17		1000	9.9934219	00/	0 1
	8	342	17			255		17.80	100 50.03	1-067	9.9933634	200	-T1+
	9	343	17	IO	20.52			15.12		+0.78	9.9933071	303	-21+

Monats- und Wochentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg Dauer St Zt.	Halbm.
Dez. 8 Mo 9 Mi 10 Mi 11 Do 12 Fr 13 Sa 14 St 15 Mo 16 Di 17 Mi 18 Do 19 Fr 20 Sa 21 St 22 Mo 23 Di 24 Mi 25 Do 26 Fr 27 Sa 28 St 29 Mo 30 Di 31 Mi 32 Do 33 Fr	-8 10.11 7 43.66 7 16.77 6 49.47 6 21.79 -5 53.75 5 25.39 4 56.72 4 27.77 3 58.58 -3 29.17 2 59.58 2 29.83 1 59.95 1 29.99 -0 59.98 -0 29.96 +0 0.04 0 29.98 0 59.82 +1 29.52 1 59.04 2 28.34 2 57.40 3 26.17 +3 54.61	16 ^b 58 ^m 13.86 17 2 36.87 17 7 0.31 17 11 24.17 17 15 48.41 17 20 13.01 17 24 37.93 17 29 3.16 17 33 28.67 17 37 54.42 17 42 20.38 17 46 46.53 17 51 12.84 17 55 39.28 18 0 5.80 18 4 32.37 18 8 58.95 18 13 25.51 18 17 52.01 18 22 18.41 18 26 44.67 18 31 10.75 18 35 36.61 18 40 2.22 18 44 27.55 18 48 52.55	n s 4 23.01 4 23.44 4 23.86 4 24.92 4 25.23 4 25.51 4 25.75 4 26.57 4 26.57 4 26.56 4 26.50 4 26.60 4 25.86 4 25.86 4 25.86 4 25.86 4 25.86 4 25.80 4 25.80	22 58 57.0 23 3 49.7 -23 8 15.1 23 12 13.0 23 15 43.2 23 18 45.5 23 21 19.9 -23 23 26.3 23 25 4.7 23 26 14.9 23 26 55.7 23 26 55.7 23 26 12.7 23 25 1.4 23 23 21.8 23 21 13.9 -23 18 37.8 23 15 33.6 23 12 1.4 23 8 1.3 23 3 33.4	6 14.0 5 47.2 5 20.0 4 52.7 4 25.4 3 57.9 3 30.2 3 4.4 2 6.4 1 38.4 1 10.2 0 14.7 0 43.0 1 11.3 1 39.6 2 7.9 2 36.1 3 4.2 3 32.2 4 0.1 4 27.9 4 55.5	141.25 141.38 141.50 141.61 141.71 141.80 141.97 142.04 142.10 142.14 142.18 142.21 142.23 142.24 142.25 142.24 142.25 142.21 142.15 142.11 142.06 142.00 141.93 141.85 141.77	16 14.41 16 14.53 16 14.65 16 14.77 16 14.88 16 15.08 16 15.26 16 15.34 16 15.48 16 15.48 16 15.54 16 15.50 16 15.70 16 15.70 16 15.78 16 15.82 16 15.88 16 15.81 16 15.93 16 15.93 16 15.93 16 15.93

Frühlingsäquinoktium Sommersolstitium Herbstäquinoktium Wintersolstitium März 20 18 Juni 21 14 Sept. 23 5 Dez. 22 0

Monats- und Juhrestag	Sternzeit	Mittleres A	İgu. 191 Diff.	3.0 Brefte	Lg. Rad. v.	Diff.	Nut iu o' dλ	
Dez. 8 342 9 343 10 344 11 345 12 346 13 347 14 348 15 349 16 350 17 351 18 352 19 353 20 354 21 355 22 356 23 357 24 358 25 359 26 360 27 361 28 362 29 363 30 364 31 365 32 366 33 367	17 6 23.97 17 10 20.52 17 14 17.08 17 18 13.64 17 22 10.20 17 26 6.76 17 30 3.32 17 33 59.88 17 37 56.44 17 41 53.00 17 45 49.56 17 49 46.11 17 53 42.67 17 57 39.23 18 1 35.79 18 5 32.35 18 9 28.91 18 13 25.47 18 17 22.03 18 21 18.59 18 25 15.15 18 29 11.71 18 33 8.27 18 37 4.82 18 41 1.38 18 44 57.94	255 46 17.80 256 47 15.12 257 48 13.13 258 49 11.83 259 50 11.23 260 51 11.36 261 52 12.23 262 53 13.87 263 54 16.31 264 55 19.58 265 56 23.70 266 57 28.68 267 58 34.49 268 59 41.10 270 0 48.47 271 1 56.57 272 3 5.32 273 4 14.63 274 5 24.40 275 6 34.53 276 7 44.91 277 8 55.44 278 10 6.01 279 11 16.54 280 12 26.96 281 13 37.21	60 57.32 60 58.01 60 58.70 60 59.40 61 0.13 61 0.87 61 1.64 61 3.27 61 4.12 61 4.98 61 5.81 61 6.61 61 7.37 61 8.10 61 8.75 61 9.31 61 9.77 61 10.13 61 10.38 61 10.53 61 10.53 61 10.53 61 10.53 61 10.53 61 10.53 61 10.53	+0.67 +0.78 +0.86 +0.93 +0.98 +0.93 +0.86 +0.77 +0.66 +0.53 +0.40 +0.27 +0.15 -0.02 -0.06 -0.07 -0.06 +0.15 +0.15 +0.26 +0.38 +0.51	9.9933634 9.9933671 9.9932020 9.9931533 9.9931072 9.9930638 9.9930232 9.9929853 9.9929500 9.9929174 9.9928873 9.9928873 9.9928595 9.9928890 9.9927693 9.9927693 9.992705 9.992705 9.992705 9.9926662 9.9926689	563 538 513 487 461 434 406 379 353 326 301 278 256 234 215 197 179 163 146 130 113 96 79 59 39	- I4 -2I -25 -19 -11 - 2 +7 +13 +15 +14 + 9 + 2 -15 -11 -4 +6 +25 +19 +11	+7 $+4$ -7 -9 -9 -7 -4 -4 $+7$ $+9$ $+8$ -6 -2 -4 -8 -6 -2 -4 -8 -6 -1 -1 -1 -1 -1 -1 -1 -1

Perigäum Jan. 0 15^h Apogäum Juli 3 13 Mittl. Äquator und Mittl. Äquinoktium 1913.0

191	13	X	Red. auf 1910,0	Y	į	Red. auf 1910.0	Z		Red. auf 1910.0
		+		-			_		
Jan.	0.0	0.161 3749 86219		0.889 7917	13531		0.385 9811	5867	
	0.5	0.109 9908		0.888 4386	14224	-1137	0.385 3944	6167	-494
	1.0	0.178 0058 Stor		0.887 0162	14916		0.384 7777	6468	
	1.5	0.107 2012 80812		0.885 5246	15608	1253	0.384 1309	6768	544
	2.0	0.195 7824 8666		0.883 9638	16299		0.383 4541	7068	
	2.5	0.204 3487 Reed	7031	0.882 3339	16988	1368	0.382 7473	7367	594
	3.0	0.212 8993 8524		0.880 6351	17677		0.382 0106	7666	
	3.5	0.221 4330 8517	7004	0.878 8674	18365	1482	0.381 2440	7964	644
	4.0	0.229 9509 8400		0.877 0309	19051		0.380 4476	8262	
	4.5	0.238 4503	0974	0.875 1258	YIV	1596	0.379 6214		694
		84810			19735		_	8560	
	5.0	0.246 9313 8461		0.873 1523	20418		0.378 7654	8856	
	5.5	0.255 3932 84420	-6942	0.871 1105	21100			9152	- 743
1	6.0	0.203 6352 8421		0.809 0005	21779		0.376 9646	9447	
	6.5	0.272 2507 8400	6908	0.800 8220	22,456		0.376 0199	9741	792
	7.0	0.280 0509 8278		0.864 5770	23131		0.375 0.158	10035	
	7.5	0.289 0352 8756	6×27	0.862 2639	23805	1935	0.374 0423	10328	V I T
	8.0	0.297 3908 8222		0.859 8834	24477		0.373 0095	10619	
	8.5	0.305 7231 8308		0.857 4357	25146	2047	0.371 9476	10910	
	9.0	0.314 0313 3283	5	0.854 9211	25814		0.370 8566	11200	
	9.5	0.322 3149	0793	0.852 3397	-54	2158	0.369 7366		938
		+ 8258	2	4000	26479			11489	
	10.0	0.330 5731 8232	2.	0.849 6918	27142		0.368 5877	11777	
	10.5	0.338 8053 8205	-6750	0.846 9776	27803		0.367 4100	12063	
	II.O	0.347 0100 8178	2	0.844 1973	28461		0.366 2037	12349	
	11.5	0.355 1891	6705	0.841 3512	29117		0.364 9688	12633	
	12.0	0.303 3394 8121	7	0.838 4395	29769		0.363 7055	12916	
	12.5	0.371 4011 8002	6658	0.835 4626	30419		0.362 4139	13198	
	13.0	0.379 5530 8062	6	0.832 4207	21067		0.361 0941	13479	
	13.5	0.387 6162 8032		0.829 3140	31711	0506	0.359 7462	12750	
	14.0	0.395 6483 8000		0.826 1429	32352		0.358 3703	14038	1
	14.5	0.403 6492	6558	0.822 9077	3-33-	2704	0.356 9665	-403	1176
		-t- 7969	2		32991		_	14315	5
	15.0	0.411 6184 7936	8	0.819 6086	33627	,	0.355 5350	14590	
	15.5	0.419 5552 7903	6	0.816 2459	34259	2810	0.354 0760	1486	
	16.0	0.427 4591 7870		0.812 8200	24880		c.352 5895		Į.
	16.5	0.435 3294 ₇₈₃ 6			35516				
	17.0	0.443 1655 7801	4	0.805 7795	26140		0.349 5350		
	17.5	0.450 9670 7766	6000		36761		_		TOT
	18.0	0.458 7332 7730		0.798 4894	37377		0.346 3723	1621	-
	18.5	0.466 4635 7694	6334					1648	
	19.0		551	0.790 9528		, ,	0.343 1027		
	,] ''' '''		1 // //			1 3.3/		

Mittl. Äquator und Mittl. Äquinoktium 1913.0

19	13	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. auf 1910.0
		+			-			-		
Jan.	19.0	0.474 1575	76570		0.790 9528	38599		0.343 1027	16745	
	19.5	0.481 8145	76196	-6273	0.787 0929	39207	-3228	0.341 4282	17008	-1404
	20.0	0.489 4341	75816		0.783 1722	39811		0.339 7274	17269	
	20.5	0.497 0157	75430	6210	0.779 1911	40412	3330	0.338 0005	17530	1448
	21.0	0.504 5587	75040		0.775 1499	41010		0.336 2475	17788	
	21.5	0.512 0627	74644	6145	0.771 0489	41604	3431	0.334 4687	18046	1492
	22.0	0.519 5271	74243		0.766 8885	42196		0.332 6641	18303	
	22.5	0.526 9514	73838	6078	0.762 6689	42785	3531	0.330 8338	18557	1535
	23.0	0.534 3352	73426		0.758 3904	43371		0.328 9781	18811	
	23.5	0.541 6778	/3420	6009	0.754 0533	433/1	3630	0.327 0970	10011	1578
		+	73010		-	43953		-	19063	
	24.0	0.548 9788	72588		0.749 6580	44522		0.325 1907	10215	
	24.5	0.556 2376	72161	-5939	0.745 2048	44532	-3727	0.323 2592	19315	-1621
	25.0	0.563 4537		3,0,	0.740 6940	45108 45681		0.321 3028	19813	
	25.5	0.570 6266	71729	5866	0.736 1259	46251	3823	0.319 3215		1663
	26.0	0.577 7557	71291 70848		0.731 5008			0.317 3156	20059	
	26.5	0.584 8405		5792	0.726 8191	46817	3919	0.315 2851	20305	1704
	27.0	0.591 8804	70399	317	0.722 0810	47381	3,7	0.313 2301	20550	
	27.5	0.598 8749	69945	5716	0.717 2870	47940	4013	0.311 1508	20793	1745
	28.0	0.605 8234	69485	37	0.712 4373	48497	' '	0.309 0474	21034	, 13
	28.5	0.612 7254	69020	5638	0.707 5322	49051	4106	0.306 9199	21275	1786
			68550	J- J-	7 7 55	49600			21513	'
	29.0	0.619 5804	60		0.702 5722			0.304 7686		
	29.5	0.626 3877	68073	5559	0.697 5575	50147	-4198	0.302 5936	21750	-1826
	30.0	0.633 1468	67591	3337	0.692 4886	50689		0.300 3951	21985	
	30.5	0.639 8572	67104	5478	0.687 3658	51228	42XX	0.298 1732	22219	TXDE
	31.0	0.646 5183	00011		0.682 1895	51763		0.295 9280	22452	
	31.5	0.653 1296	66113		0.676 9602	54493	4000	0.293 6598	22682	190.1
Febr	. I.O	0.659 6905	65609		0.671 6782		43//	0.291 3687	22911	
	1.5	0.666 2005	651∞		0.666 3439	55545	4464	0.289 0549	23138	TO 42
	2.0	0.672 6591	17		0.660 9578	53861	4404	0.286 7185	-33-4	
	2.5	0.679 0657	64066	5225	0.655 5203	54375	4550	0.284 3598	23587	1979
	۳٠)	4	63540		0.055 5205	54884		0.204 3390	23809	1
	20	0685 4107			0.650 0319			0.281 9789		
	3.0	0.685 4197	63010	FTON	0.644 4930	22302				-2016
	3.5	0.691 7207	62475	-5137		2200		0.279 5761	-4-4-	
	4.0	0.697 9682	61935	F0.40	0.638 9040	50300		0.277 1515		
	4.5	0.704 1017	61389	5040	0.633 2654		4718	0.274 7054	~4~/4	
	5.0	0.710 3006			0.627 5776	5/304		0.272 2380	24886	0.00
	5.5	0.716 3845	60284	4957	0.621 8412		4800	0.269 7494		2088
	6.0	0.722 4129	59725	.06	0,616 0566	58322		0.267 2399		
	6.5	0.728 3854	59161	4865	0.610 2244		4880	0.264 7096	25507	2123
	7.0	0.734 3015			0.604 3449			0.262 1589		

Mittl. Äquator und Mittl. Äquinoktium 1913.0

1913	X		Red. auf 1910.0	Y		Red. auf 1910.0	ī	Z		Red. auf 1910.0
	+						_			
Febr. 7.0	0.734 3015	58591		0.604 3449	59263		0.262		25710	
7.5	0.740 1606	58018	-477I	0.598 4186	59725	-4959	0.259		25911	-2157
8.0	0.745 9624	57440		0.592 4461	60182		0.256		26109	
8.5	0.751 7064	56857	4675	0.586 4279	60625	5037	0.254	3859	26306	2191
9.0	0.757 3921	56270		0.580 3644	61082		0.251		26500	
9.5	0.763 0191	55679	4578	0.574 2562	61524		0.249	1053	26692	222
10.0	0.768 5870	55085		0.568 1038	61060		0.246	4361	26881	
10.5	0.774 0955	54485	4480	0.561 9078	62201		0.243		27067	2256
0.11	0.779 5440	53881		0.555 6687	62818		0.241		27251	
11.5	0.784 9321	33	4380	0.549 3869		5260	0.238	3161		2288
		53275			63238		_		27435	
12.0	0.790 2596	52665		0.543 0631			0.235		27615	
12.5	0.795 5261	52050	-4279	0.536 6977	61064	-5331	0.232	8111	27793	-2319
13.0	0.800 7311	51422		0.530 2913	6460		0.230	0318	27969	
13.5	0.805 8743	E0811	4176	0.523 8444	6.868		0.227	2349	28141	2349
14.0	0.810 9554	50186		0.517 3576	65263		0.224	4208	28311	
14.5	0.815 9740	50100	4072	0.510 8313	65651		0.221	5897	28480	2378
15.0	0.820 9298	49558		0.504 2662	66035		0.218		28646	
15.5	0.825 8225	4090/	3967	0.497 6627	6641		0.215		28809	240'
16.0	0.830 6518	48293		0.491 0215	66-9-	3333	0.212			
16.5	0.835 4174	47656	3861	0.484 3430	00785	5599	0.210		28971	2435
,	-t-	47015		- 13,3	67152	1 3377	_		29129	
17.0	0.840 1189			0.477 6278)		0.207	1862	- 07	
17.5	0.844 7561	403/2	AME I	0.470 8764	67514	-5662	0.204		29286	216
18.0	0.849 3287	45726	ĺ	0.464 0893	67871	, , , , ,	0.201	2135	29441	
18.5	0.853 8365	430/0	2646	0.457 2670	OCLE	5723	0.198		-9090	1 0 1 X
19.0	0.858 2791	44440		0.450 4100	003/0		0.195		49/43	1
19.5	0.862 6563	43//-	25.20	0.443 5189	- /	5782	0.192		29891	251
2 0.0	0.866 9678	43.13		0.436 5941	9	,	0.189		30036	,
20.5	0.871 2134	4-45	0425	0.429 6362	- /5/	5839			30180	2.5.21
21.0	0.875 3928	41/94		0.422 645	, "JJO.)	0.183		30321	
21.5	0.879 5058		3314	0.415 6230		5895	0.180	2011	30460	256
-1.3		40462		0.41) 023	7°54:		0.100	49	30596	
22.0	0.883 5520)		0.408 568			0.177	- 22TE		
22.5	0.887 5312	37/7-		0.400 300	7085	5040			30/3	27 X
23.0	0.807 5312	39119	-3202	0.401 483	7116	5949	0.1/4	2703	3086	250
	0.891 4431	2044		0.394 3673	/		0.171			261
23.5	0.895 2875	37766	3000	0.387 221	1-13					261
24.0	0.899 0641	37084		0.380 045	, , 5		0.164	0598	. 3	
24.5	0.902 7725	36399	2 973	0.372 840		6 6051				263
25.0		3571	.0.0	0.365 606	/20.		0.158	5971	3149	7 -6
25.5	0.909 9835	25021	2XEX	0.358 3450		6099		4474	3161	
2 6.0	0.913 4856)		0.351 055	7		0.152	2857		

Mittl. Äquator und Mittl. Äquinoktium 1913.0

1913	X		Red.auf 1910.0	Y		Red. auf 1910.0	Z		Red. and 1910.0
70.1	+			_			-		
Febr. 26.0	0.913 4856	34328		0.351 0557	73163		0.152 2857	31734	
26.5	0.916 9184	33633	2741	0.343 7394	72428	-6145	0.149 1123	31850	-2673
27.0	0.920 2817	32934		0.336 3966	73687		0.145 9273	31963	
27.5	0.923 5751	32234	2624	0.329 0279	73940	6190	0.142 7310	32073	2692
28.0	0.926 7985	31530		0.321 6339	74188		0.139 5237	32181	
28.5	0.929 9515	30824	2506	0.314 2151	74431	6233	0.136 3056	32286	2711
März 1.0	0.933 0339	30115	0	0.306 7720	74667		0.133 0770	32389	
1.5	0.936 0454	29404	2387	0.299 3053	74898	6274	0.129 8381	3249	2729
2.0	0.938 9858	28691		0.291 8155	75123		0.126 5891	32587	
2.5	0.941 8549		2267	0.284 3032		6313	0.123 3304		27.46
	+	27974		_	75341		· ·	32683	
3.0	0.944 6523	27255		0.276 7691			0.120 0621	32776	
3.5	0.947 3778	26535	2147	0.269 2137	75762	-0250	0.116 7845	32867	-2762
4.0	0.950 0313	25813		0.261 6375	75962		0.113 4978	32954	
4.5	0.952 6126	25089	2020	0.254 0412	-6158		0.110 2024	33038	2000
5.0	0.955 1215	24363		0.246 4254	76347		0.106 8986	33120	
5.5	0.957 5578	23636		0.238 7907	76520	6.4TX	0.103 5866	33200	
6.0	0.959 9214	22906		0.231 1378	56706		0,100 2666	33277	
6.5	0.962 2120	22574		0.223 4672	76877		0.096 9389	33351	2806
7.0	0.964 4294	21441		0.215 7795	75040		0.093 6038	33423	
7.5	0.966 5735	2.44.	1660	0.208 0755	//	6478	0.090 2615	337-3	2818
	+	2 0707		-	77198		1:	33491	
8.0	0.968 6442	19972		0.200 3557	77350		0.086 9124	33557	
8.5	0.970 6414	10225		0.192 6207		0.00	0.083 5567	33621	
9.0	0.972 5649	18496		0.184 8711	77636		0.080 1946	33681	
9.5	0.974 4145	17757		0.177 1075	77769	6FAT	0.076 8265	33738	2841
10.0	0.976 1902	17016		0.169 3306	77806		0.073 4527	33793	
10.5	0.977 8918	16276	1200	0.161 5410	78016	6000	0.070 0734	33845	2XCT
11.0	0.979 5194	15534		0.153 7394	78130		0.066 6889	33894	
11.5	0.981 0728	14793	TIOD	0.145 9264	78238		0.063 2995	33941	1 2.Xfc
12.0	0.982 5521	14050		0.138 1026	78340		0.059 9054	33986	
12.5	0.983 9571	14030	1041	0.130 2686	70340	6596	0.056 5068	33900	2868
	-+-	13306			7 ⁸ 435			34027	1
13.0	0.985 2877	12562		0.122 4251	78524		0.053 1041	34065	
13.5	0.986 5439	11818	0.6	0.114 5727			0.049 6976	34101	2X!7f
14.0	0.987 7257	11072		0.106 7120			0.046 2875	34.01	
14.5	0.988 8330	10328	POT	0.0	78756		0.042 8741	34134	2880
15.0	0.989 8658	5		0.090 9679			0.039 4577		
15.5	0.990 8241	9583 8839	hhr.	0.083 0859	78879		0.036 0385	34192	2.XXC
16.0	0.991 7080	0039		0.075 1980		,	0.032 6169	34216	
16.5	0.992 5175	0095		0.067 3049		6654	0.029 1930	34-37	220
17.0	0.993 2525	7350	, , ,	0.059 4071		, , , ,	0.025 7671	34259	,

Mittl. Äquator and Mittl. Äquinoktium 1913.0

1913	"X	Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. auf 1910.0
1.5.	+		_			-		
März 17.0	0.993 2525 66	07	0.059 4071	79019		0.025 7671	34276	0.0
17.5	0.993 9132	63 413	0.051 5052	79054	6663	0.022 3395	34290	-2898
18.0	0.004.4005	20	0.043 5998	79083		0.018 9105	34303	
18.5	0.995 0115	78 287	0.035 6915	79107	6670	0.015 4802	34313	2901
19.0	10.005.4402	36	0.027 7808	79125		0.012 0489	34321	
19.5	0 005 X T40	161	0.019 8683	79138	6675	0.008 6168	34326	2903
20.0	0.000 1023		0.011 9545	79144		0.005 1842	- 0	
20.5	0.996 3176	-35	0.004 0401	/9144	6678	0.001 7514	34328	2904
	I2	12	+	79146		+	34328	
21.0	0.996 4588		0.003 8745			0.001 6814		
21.5	0.996 5260	172 + 91	0.011 7887	79142	6680	0.005 1141	343=7	2905
,		68	+ '	79132		-+-	34323	
22.0	0.996 5192		0.019 7019			0.008 5464		
22.5	0.006.1080	309 2.17	0.0276137	79110	(16XO	0.011 9781	34317	-2905
23.0	0.006.2825	40	0.035 5235	79098	0000	0.015 4089	34308	
23.5	0.996 0547	88	0.035 5235	79072	6677	0.018 8386	34297	2904
2 4.0		343	0.043 4307	1904-		0.022 2670	34284	
	0.995 7520	65	0.051 3349	79006	66.00	0.022 2070	34268	2002
2.1.5	0.995 3755	469	0.059 2355	78964	6672	0.025 6938	34251	2902
25.0	0.994 9252	142	0.067 1319	78916	1111	0.029 1189	34230	
25.5	0.994 4010	595	0.075 0235	78863	6666	0.032 5419	34207	2899
26.0	0.993 8030 6	718	0.082 9098	78804		0.035 9626	34182	
26.5	0.993 1312	721	0.090 7902		6658	0.039 3808		2095
		155	+	78740		+	34155	
27.0	0.992 3857 8	192	0.098 6642			0.042 7963	34129	
27.5	0.991 5005 8	+ 846	0.106 5312	78505		0.046 2088	34093	-2X0 T
28.0	0.990 0737	564	0.114 3907	78514		0.049 6181	34058	
28.5	0.989 7073	399 971	0.122 2421			0.053 0239	34020	2880
29.0	- 00//	134	0.130 0847			0.056 4259	33980	1
29.5	0.08# 5540		0.137 9180	/º333		0.059 8239	33900	2X70
30.0	0.006.0640	, ,	0.145 7415	/0233)	0.063 2177	3373	,
30.5	0.085 1074	1221	0.153 5544	1011		0.066 6069	3309	2272
31.0	0 082 7742	332	0.161 3562	10020	,	0.069 9913	3304	,
31.5	0.982 3678	1345	0.169 1463		6585	0.073 3707		2864
57		794	+	77779		+	3374	
April 1.0	0.980 8884	//	0.176 9242			0.076 7449		
1.5		5 ²³ + 1469		1100	6 = 6 =	0.080 1135	33000	2877
2.0		250 4-1409		, 115.				8 4000
		977	0.192 4407	1/3/:		0.083 4763		2846
2.5	0.976 0134 17	702 159 2		//24	6543	0.086 8330		3 2040
3.0	0.974 2432 18	425	0.207 9010		5	0.090 1833		8
3.5	0.972 4007	1715	-		6519			2836
_ 4.0	0.970 4861	867	0.223 3003	7675	3	0.096 8640	3329	8
4.5	0.968 4994	1838	0.230 9756	7658	6493	0.100 1938	2322	2.82.4
5.0	0.966 4408		0.238 6339)		0.103 5162	,	

Mittl. Äquator und Mittl. Äquinoktium 1913.0

1913	X	Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. aut
A	+		+			+	4-	
April 5.0	0.966 4408 21303		0.238 6339	76407		0.103 5162	33147	
5.5	0.964 3105 22019	+1960	0.246 2746	76225	-6465	0.106 8309	33069	-2812
6.0	0.962 1086	0	0.253 8971	76037		0.110 1378	32987	
6.5	0.959 8354 23443	2081	0.261 5008	75843	6435	0.113 4365	32903	2799
7.0	0.957 4911 21153		0.269 0851	75643		0.116 7268	32816	0-
7.5	0.955 0759 24859	2202	0.276 6494	75438	6403	0.120 0084	32727	2785
8.0	0.952 5900 ₂₅₅₆		0.284 1932	75227		0.123 2811	32635	
8.5	0.950 0337 2626.	2322	0.291 7159	75010	6369	0.126 5446	32540	2770
9.0	0.947 4073 2696.		0.299 2169	74787		0.129 7986	32443	
9.5	0.944 7109	2441	0.306 6956	0	6333	0.133 0429	22244	275
	1- 27660		+	74558		+	32344	
10.0	0.941 9449 2835.		0.314 1514			0.136 2773	32243	
10.5	0.939 1095 2004	+2560	0.321 5838		-6296	0.139 5016	32138	-2738
11.0	0.930 2051 2073	2	0.328 9923		1	0.142 7154	32031	
11.5	0.933 2318 3041	2075	0.336 3762		6257	0.145 9185	31922	272
12.0	0.930 1900		0.343 7351	73333		0.149 1107	31811	
12.5	0.927 0799 3178	2795	0.351 0684	72071		0.152 2918	31697	270
13.0	0.923 9018		0.358 3755	72805		0.155 4615	31581	
13.5	0.920 0500 3313		0.365 6560	72533	10177	0.158 6196	31463	2 68.
1.4.0	0.917 3429 2280		0.372 909.1	72257		0.161 7659	31343	
14.5	0.913 9628	3027	0.380 1351		6128	0.164 9002		266
	+ 3446	7	+	71976		-+-	31220	
15.0	0.910 5161		0.387 3327		,	0.168 0222	31005	
15.5	0.907 0031		0.394 5017	71300	6041	0.171 1317	30968	26.1
16.0	0.903 4241 2611		0.401 6416	71103	1	0.174 2285	30840	
16.5	0.899 7794	0355	0.408 7519	70802		0.177 3125	30,00	2612
17.0	0.896 0693		0.415 8321	70497	1	0.180 3834	20577	1
17.5	0.892 2942 2820		0.422 8818	70187	5080		30443	260
18.0	0.888 4545	71	0.429 9005	6087		0.186 4854	20207	
18.5	0.884 5504 2068		0.436 8878	borr	5931	0.189 5161	20168	
19.0	0.880 5821		0.443 8432	6022		0.192 5329	30028	3
19.5	0.876 5500	3590	0.450 7663	3	5877	0.195 5357		255
	4- 4095	5	-	6890		-1-	29886	
20.0	0.872 4545 4158		0.457 6567	6857	,	0.198 5243	29741	
20.5	0.868 2958 4130		0.464 5139	68221	5822	0.201 4984	29596	-253
21.0	0.864 0742		0.471 3379	6280	-	0.204 4580	20.010	
21.5	0.859 7900 4246	-0-0	0.478 1270	6754	5765	0.207 4029	20100	
22.0	0.855 4435	3	0.484 8819	67200	2	0.210 3329	29148	
22.5	0.851 0351	2015	0.491 0010	668	5700		2899	
23.0	10816 =650		0.498 286	1 66.0	6	0.216 1472	28830	
23.5	108120225 333	1021	0.504 9350	66.50	5646		2868	
2.1.0		5	0.511 5473	0012	5	0.221 8993	2000	

191	13	X		Red. auf 1910.0	1	,		Red. auf 1910.0	Z		Red. auf 1910.0
		+-			+				+		
Λ pril		0.837 4410	46533		0.511 54	73	65755		0.221 8993	28523	
	24.5	0.832 7877	47137	+4126	0.518 12		65382	-5584	0.224 7516	28361	-2129
	25.0	0.828 0740	47739		0.52466		65005		0.227 5877	28198	
	25.5	0.823 3001	48337	4230	0.531 16		64623	5520	0.230 4075	28033	2401
	26.0	0.818 4664	48931		0.537 62	38	64237		0.233 2108	27866	
	26.5	0.813 5733	49523	4333	0.544 04	75	63846	5455	0.235 9974	27697	2373
	27.0	0.808 6210	50111		0.550 43	21	63450		0.238 7671	27525	
	27.5	0.803 6099	50694	4435	0.556 77	11	63049	5388	0.241 5196	27351	23.4.1
	28.0	0.798 5405	51275		0.563 08	20	62644		0.244 2547	27176	
	28.5	0.793 4130	312/3	4535	0.569 34		02044	5320	0.246 9723	2/1/0	2314
		-	51852		+-		62234		+	26999	
	29.0	0.788 2278	en 125		0.575 56	98	61819		0.249 6722	26819	
	29.5	0.782 9853	52425	-1-4634	0.581 75	17		-5250	0.252 3541	26637	
	30.0	0.777 6858	52995		0.587 89	17	61.400	, ,	0.255 0178		
	30.5	0.772 3297	53561	4731	0.593 98	303	60976	5179	0.257 6632	26454	2253
Mai	1.0	0.766 9175	54122		0.600 04	142	00347	5-17	0.260 2900	26268)
	1.5	0.761 4496	54679	1 400	0.606 05		60116	5106	0.262 8981	26081	2221
	2.0	0.755 9263	55233		0.612 02	ייני דיני	59679	3100	0.265 4872	25891	
	2.5	0.750 3480	55783	4022	0.617 94		59237	F022	0.268 0572	25700	2.180
	3.0		56328	4922	0.623 82		58791	5032	0.270 6078	25506	2109
		0.744 7152	56870				58341	1016		25311	07.56
	3.5	0.739 0282	F7.406	5015	0.629 66)00	57886	4956	0.273 1389	25772	2150
		+	57406		1				+	25113	
	4.0	0.733 2876	57938		0.635 44			.00	0.275 6502	24914	
	4.5	0.727 4938	58466		0.641 19			-4878	0.278 1416	24713	2123
	5.0	0.721 6472			0.646 88		56405		0.280 6129	24509	0.4
	5.5	0.715 7483	59508	5198	0.652 53	377	56023	4799	0.283 0638	24304	2088
	6.0	0.709 7975	6002.1		0.658 14		55547		0.285 4942	24007	
	6.5	0.703 7954	60520	5287	0.663 69		550.66	4719	0.287 9039	22880	205
	7.0	0.697 7425	61022		0.669 20		54582		0.290 2928	23679	
	7.5	0.691 6392	61522	5374	0.674 65		5,1002	4025	0.292 6607	23466	201
	8.0	0.685 4860	62026		0.680 06	588	53600		0.295 0073	23252	
	8.5	0.679 2834		5460	0.685 42	288	53000	4555	0.297 3325	*3*3*	198
		-1-	62515		4-		53105		-4-	23036	5
	9.0	0.673 0319	60000		0.690 73	393	52605		0.299 6361	22810	
	9.5	0.000 7320		1-5544	-		52005	4.477	0.301 9180		
	10.0	10.000 3043			0.701 21		32102		0.304 1781	22001	
	10.5	0.653 9893	03950	5627	0.706 30		51595	42XC	0.306 4162	22301	190
	11.0	0.647 5475	64418	57	0.7114		7.004		0.308 6321	2413	-
	11.5	0.641 0504	64881	5708	0.716 53	1 / 7 2 ¢ 0)~)/~	420X		75.	186
	12.0	0.641 0594	65339	3/00	0.721 54	704 227	3-33	1	0.312 9966	/	1
	12.5	0.634 5255	65791	rngn	0.725 4	403	49533	1271		22402	
		0.627 9464	66238	5787	0.726 49			4211	0.315 1450		7 103
	13.0	0.621 3226			0.731 39	945			0.317 2707		

Mittl. Äquator	und	Mittl.	Äquinoktium	1913.0
----------------	-----	--------	-------------	--------

19	13	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z		Red. anf
		+		+		+		
Mai	13.0	0.621 3226 66680	I	O 727 2045	483	0.317 2707	21028	
	13.5	0.614 6546 67116	0/_	0.736 2428	-4122	O OTO OFOR	20798	-1792
	14.0	0 607 0400		0.7/11 0281 4/	953	O 22T 4522		
	14.5	0 601 TRRO 1/34/		0745 7802 4/	4032	0 222 5 100	20567	1753
	15.0	0,9/3		0.750 1680 40	1007	000 5105	20335	
	15.5	0 587 5576 374		OFFE TORO	35° 3941	0 000 5500	20102	1713
	16.0	0.580.6706		0 750 6848 45	000	0.329 5404	19867	, ,
	16.5	0 572 748= 09221	6088	07642114 45	²⁶⁶ 3848	0 00T 5006	19632	1673
	17.0	0 566 7858 09027		0.768 6825 44	/21	0.333 4432	19396	/5
	17.5	0.559 7830 70.28	6159	0.773 1007 44	172	0.335 3590	19158	1632
	(۰/۰				3754		18919	
	18.0	- 		C HHH - 600		+-	10919	
	18.5	0.552 7406	16000	0.777 4628	068	C COC TTVV	18679	THAT
		0.545 6591 71201	+-6228	0.701 7090	-3660		18438	-1591
	19.0	0.538 5390 71582		0.700 0200	052	0.340 9626	18196	
	19.5	0.531 3808	0205	0.790 2101	393 3564	0.342 7822	17953	1550
	20.0	0.524 1849		Q-794 3554	820	○.344 5775	17710	
	20.5	0.510 9518		0.798 4384	3467	0.346 3485	17465	1508
	21.0	0.509 0821		0.802 4648	606	0.348 0950	17219	
	21.5	0.502 3761 73418	0.12.5	0.806 4344	3369	0.349 8169	16971	1466
	22.0	0.495 0343		1 0 X TO 2470	551	0.351 5140	16723	
	22.5	0.487 6572	6487	0.814 2021 30	3270	0.353 1863	10,23	1423
		74118		-+- 37	974	+	16473	
	23.0	0.480 2454 746		0.817 9995		0.354 8336	16222	
	23.5	0.472.7002	1-4-1) 5.17	0 801 HOOD 3/	$\frac{395}{812} - 3170$	0.356 4558		1380
	2.1.0	0 465 2104 1419		0825 1202	1013	0.358 0529	15971	
	24.5	0 457 8062 1313	DC()=	0 820 0422	3070	0.359 6246	15717	1336
	25.0	0 450 2604 75455		0.832 6074 35	642 5070	0.361 1708	15462	- 55
	25.5	0 440 6000 75701		0.836 1127 35	2969	0.362 6915	15207	1292
	26.0	0 105 0001		0 800 FERE 34	400	2 261 - 266	14951	1292
	26.5	0.435 0724 76411	6716	0 842 0452 33	2867	0.365 6559	14693	TOAF
		0.427 4313 76718	6716	0.6 0 0 33	208		14433	1247
	27.0	0.419 7595 77020	6-6-		.668	0.367 0992	14173	T404
	27.5	0.412 0575	6769	0.849 5388	2764	0.368 5165	****	1202
	0	+ 77316			:066		13913	
	28.0	0.404 3259 77607		0.852 7454 31	462	0.369 9078	13650	
	28.5	0.396 5652		0.855 8916	-2660	0.371 2728	13387	-1157
	2 9.0	0.388 7700		0.858 9771	245	0.372 6115	13123	
	29.5	0.380 9589 78445		0.862 0016	2555	0.373 9238	12858	
	30.0	0.373 1144 78713		0.804 9050	1020	0.375 2096	12592	
	30.5	0.365 2431 78976	L COTA	0.867 8670	2450	0.376 4688	12324	T Of M
	31.0	0 257 2455 109/0		0 9 0 0 0 0 0 0 0	785	0.377 7012	12056	
	31.5	0 240 422T 19-34	0050	0872 4850	2.211	0.378 9068	_	1000
$J_{ m uni}$	1.0	0.341 4736 79485	737	0.876 2022	163 2344	0.380 0854	11786	
		31 1/3		,		,		

191	13	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. auf 1910.0
	Ţ	+			+			+		
Juni	0.1	0.341 4736	79731		0.876 2022	26540		0.380 0854	11516	
	1.5	0.333 5005	79971	+-7002	0.878 8562	25015	-2238	0.381 2370	11244	-973
	2.0	0.325 5034	80205		0.881 4477	05088		0.382 3014	10972	
	2.5	0.317 4829	80422	7043	0.883 9765	24660	2131	0.383 4580	10600	926
	3.0	0.309 4397	80654		0.886 4425	4.040		0.384 5285	10425	
	3.5	0.301 3743	80860	7082	0.888 8454	22206	2023	0.385 5710	10150	879
	4.0	0.293 2874	81078		0.891 1850	22-62		0.386 5860	9875	
	4.5	0.285 1796	81281	7119	0.893 4612	22126	1914	0.387 5735	9599	832
	5.0	0.277 0515	81478		0.895 6738	21480		0.388 5334	9321	
	5.5	0.268 9037	4/-	7153	0.897 8227		1805	0.389 4655	/5	785
		+	81668			20849		+	9043	
	6.0	0.260 7369	81852		0.899 9076	20208		0.390 3698	8765	
	6.5	0.252 5517	82020	+7186	0.901 9284	19566	1695	0.391 2463	8487	-738
	7.0	0.244 3488	82200		0.903 8850	18924		0.392 0950	8207	
	7.5	0.236 1288	82365	7217	0.905 7774		1585	0.392 9157	7927	690
	8.0	0.227 8923	82524		0.907 6054			0.393 7084	7647	
	8.5	0.219 6399		7246	0.909 3689	16989	1475	0.394 4731	7367	642
	9.0	0.211 3722	82823		0.911 0678	16343		0.395 2098	7087	
	9.5	0.203 0899	02023	7272	0.912 7021	10343	T2() 4	0.395 9185	6866	593
	10.0	0.194 7936	02903		0.914 2717	-3-7-		0.396 5991		
	10.5	0.186 4840		7296	0.915 7765		1253	0.397 2515	6524	545
		-4-	83224		+	14400		+	6243	
	0.11	0.178 1616	Sec. (.		0.917 2165			0.397 8758	5962	
	11.5	0.169 8270			0.918 5917	3/3-		0.398 4720	5680	
	12.0	0.161 4809		. , , ,	0.919 9019	1		0.399 0400		
	12.5	0.153 1238		7340	0.921 1471	4)	TO20	0.399 5798	5398	1 117
	13.0	0.144 7564	030/4		0.922 3273	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.400 0914	5116	
	13.5	0.136 3792	-3/1		0.923 4425			0.400 5748	4834	208
	14.0	0.127 9928			0.924 4927			0.401 0300	4552	
	14.5	0.119 5977	83951	7374	0.925 4778	3.7.	XOF	0.401 4570	4270	240
	15.0	0.111 1945			0.926 3979) 9201		0.401 8558	3988	
	15.5	0.102 7837	84108	7388	0.927 2528		692		3707	300
).)	-1-	84178		+	7898	-	+	3424	
	16.0	0.094 3659			0.928 0426	5		0.402 5689		
	16.5	0.085 9417	84242	-1-7400	0.928 7672	7 / 44			3144	1 - 2 F T
	17.0	0.077 5117	- TJ	-	0.929 426	7 9593) i	0.403 1690	2055	
	17.5	0.069 0764	84353	74.10		7 224.	1 466		23//	202
	18.0	0.060 6363	84401	74.10	0.930 5499	34%	,	0.403 6561	22.74	+
	18.5	0.052 1920			0.931 013	4 4 3.	0.0		2011	T = 0
	19.0	0.034 1940	84480	74.0	0.931 412:	2 390		0.404 0301	*/-5	
		0.043 7440	8451	7424		_ 333.			*44	T 0.4
	19.5	0.035 2928	8453	7424	0.931 745	2670	239	1	4 4 0 4	104
	20.0	0.020 039	l.		0.934 013.	+		0.404 2909		

Mittl.	Äquator	und	Mittl.	Äquinoktiun	1013.0
2.2				~~ (1 1917.0

				1910.0	Y		Red. auf 1910.0	Z		Red. auf 1910.0
Jun:		+			+			4.		
Juni	20.0	0.026 8391 8	4557	0	0.932 0134	2026		0.401 2909	880	
	20.5	0.016 3634 8	4572	+-7428	0.932 2160	1372	— 12 6	0.404 3789	596	- 54
	21.0 21.5	0.009 9262 ₈ 0.001 4682	4580	7420	0.932 3532	717	т.	0.404 4385	313	_
	41.5		84584	7429	0.932 4249	63	- 12	0.404 4698	29	5
	22.0				0.932 4312	-				
	22.5	0 "	4582	7428	0.932 3720	592	 - 101	0.404 4472	255	+ 45
	23.0	0	4574	/4	0.932 2473	1247		0.404 3934	538	, 4)
	23.5	(- 0	84560	7425	0.932 0571	1902	215	0.404 3112	822	94
	24.0	0 "	84541 84516	, , ,	0.931 8015	2556		0.404 2006	1106	, ,
	24.5	0.049 2675	4510	7421	0.931 4804	3211	328	0.404 0616	1390	143
			34484		-+-	3866		+	1674	
	25.0	0.057 7159 8	34447		0.931 0938	4521		0.403 8942	1958	
	25.5	0.000 1000 8	34404 34404	+7415	0.930 6417	5176	4- 441	0.403 6984	2242	+-192
	26.0	0.074 0010 8	4355		0.930 1241	5831		0.403 4742	2526	1
	26.5	0,003 0305 0	,	7407	0.929 5410	6486	554	0.403 2216	2810	241
	27.0	0.091 4005			0.928 8924	7140		0.402 9406	3095	
	27.5	0.099 0905 8	34174	7396	0.928 1784	7795	667	0.402 6311	3379	290
	28.0	0.100 3079 8	34102		0.927 3989	8450	. 0	0.402 2932	3663	
	28.5	0.110 7101	24000	7383	0.926 5539	9103	780	0.401 9269	3947	339
	29.0	0.125 1203 8	3937	m.60	0.925 6436	9756	0-4	0.401 5322	4230	-00
	29.5	0.133 5140	3845	7368	0.924 6680	10410	892	0.401 1092	4512	388
	20.0	- "	'3''4 3		0.923 6270	10410		0.400 6579	4513	
	30.0	0.141 8985 ₈ 0.150 2733 ₈	3748	+7351	0.923 0270	11062	+-1005	0.400 1782	4797	1.127
Juli	1.0	0.6.0	3645		0.921 3493	11715	1 1005	0.399 6702	5080	+437
	1.5	0.166.0011	3536		0.920 1126	12367	1117	0.399 1339	5363	486
	2.0	0.175 3333 8	83419	/ / / / /	0.918 8107	13019		0.398 5693	5646	
	2.5		83297 83168		0.917 4438	13669	T220	0.397 9764	5929	535
	3.0	0	3310a 33033		0.916 0119	14319 14967		0.397 3553	6211	, ,,,,
	3.5		82891	7287	0.914 5152	15614	T440	0.396 7060	6493 6774	583
	4.0	0.208 5722	82743		0.912 9538	16261		0.396 0286	7055	
	4.5	0.210 8405		7201	0.911 3277	10101	1451	0.395 3231	/033	631
			82589		+-	16905		+	7336	
	5.0	0.225 1054 8	82428		0.909 6372	17549		0.394 5895	7615	
	5.5	0.233 3482 5	82261	+7234	0.907 8823	18192	+1502	0.393 8280	7894	
	6.0	0.241 5743			0.906 0631	18833	-6-	0.393 0386	8172	
	6.5	0.249 7831	81908	7205	0.904 1798	19471	T/1/72	0.392 2214	8140	
	7.0	0.257 9739	81723	h . h .	0.902 2327	20108	エカソヘ	0.391 3765	8726	
	7.5 8.0	0.266 1462	81532	7173	0.900 2219	20743		0.390 5039		775
	8.5	0.274 2994	81335	7120	0.898 1476	21376	T V O T	0.389 6037 0.388 6760	94//	Xaa
	9.0	0.282 4329	81131	7139	0.893 8092	22008	1091	0.387 7210	9550	623

Juli 9.0 0.290 5460 80922 9.5 0.298 6382 80708 10.0 0.306 7090 80487 10.5 0.314 7577 80261 11.0 0.322 7838 8030 11.5 0.332 7868 7027 0.338 7662 7027 0.886 8302 24513 0.388 4692 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 8662 0.388 18654 0.386 6531 0.386 738 0.381 420 0.364 7214 70304 0.354 6518 70052 0.362 5570 0.870 201 0.870 201 0.870 201 0.370 4365 78532 0.386 1162 70992 0.386 1162 70992 0.393 9154 70714 0.401 6868		1910.0
9.5 0.298 6382 80708 10.0 0.306 7090 80487 10.5 0.314 7577 80261 11.0 0.322 7838 80030 11.5 0.338 7662 7027 0.884 8302 25135 0.384 628 12.0 0.338 7662 7027 0.879 2901 26370 0.386 738 0.381 420 0.384 6518 13.0 0.364 6518 70952 0.362 5570 0.370 4365 70572 0.370 4365 14.5 0.370 4365 78532 15.0 0.370 4365 77092 15.5 0.393 9154 77714 6850 0.856 4926 3026 3026 30372 85 16.0 0.401 6868 77714 16.0 0.401 6868		
9.5 0.298 6382 80708 10.0 0.306 7909 80487 10.5 0.314 7577 80261 11.0 0.322 7838 8030 11.5 0.330 7868 7027 0.884 8789 25135 2215 0.384 692 25135 0.384 692 25135 0.384 692 25135 0.384 692 25135 0.384 692 25135 0.384 692 0.384		
10.0 0.300 7090 80487 10.5 0.314 7577 80261 11.0 0.322 7838 8030 11.5 0.330 7868 70794 12.0 0.338 7662 70552 12.5 0.346 7214 70552 13.0 0.354 6518 70952 13.5 0.362 5570 0.362 5570 0.370 4365 14.5 0.370 4365 78532 14.5 0.378 2897 78265 15.0 0.386 1162 77992 15.5 0.393 9154 77714 16.0 0.401 6868 77714 16.0 0.401 6868 77714 16.0 0.401 6868	7	
10.5 0.314 7577 80261 11.0 0.322 7838 8030 11.5 0.330 7868 7027 0.884 3789 25135 0.383 622 0.383 622 0.383 622 0.383 622 0.383 622 0.383 622 0.382 533 0.879 2901 25753 0.381 420 0.354 6518 79052 0.362 5570 0.871 1949 26268 0.370 902 0.370 4365 78532 14.5 0.376 4365 78532 14.5 0.386 1162 77992 15.5 0.393 9154 77714 6850 0.859 5478 3026 2638 0.372 85 0.371 522 0.372 85 0.371 522 0.	2 20266	
11.0 0.322 7838 8030	10627	017
11.5 0.336 7868 79794 7052 12.5 0.346 7214 79304 13.0 0.354 6518 79052 13.5 0.370 4365 78532 14.5 0.370 4365 78532 14.5 0.378 2897 78265 15.0 0.386 1162 77992 15.5 0.393 9154 77714 16.0 0.401 6868 16.0 0.40	9 10006	
12.0 0.338 7602 79552 0.346 7214 79304 13.0 0.354 6518 79052 13.5 0.362 5570 0.942 0.370 4365 78795 14.0 0.370 4365 78265 15.0 0.386 1162 77992 15.5 0.393 9154 77714 16.0 0.401 6868 16.0 0.401 6868 16.0 0.401 6868 16.0 0.401 6868 16.0 0.401 6868 16.0 0.401 6868 0.856 4850 0.856 4850 0.856 4850 0.371 52' 0.3	3 11174	
12.5 0.346 7214 79304 6985 0.876 6531 26985 0.873 9546 27597 0.362 5570 6942	9	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7 11708	TOOO
13.5 0.362 5570 7955 6942 0.871 1949 27597 2428 0.377 905	Ω 11/00	
14.0 0.370 4365 78532		1055
14.0 0.370 4365 78532	12238	
14.5 0.378 2897 78265 +6897 0.865 4926 29422 +2533 0.375 436	8	
15.0 0.386 1162 77992 0.862 5504 3026 0.374 153 16.0 0.401 6868 77714 0.856 4850 0.856 4850 0.371 52	H 12501	L.L.T.LO.D
15.5 0.393 9154 77714 6850 0.859 5478 3c628 2638 0.372 85	1 12/03	3
16.0 0.401 6868 ///14 0.856 4850 3.020 0.371 52/	~ *3 ~~>	
10.0 0.401 0000	2 13	1
76 8 0 102 1000 (/730) 6907 0 980 0607 31279 0810 0810 78	7 13340	TIO
15 0 0 AXE TAAT //143	13805	1192
20.6 0.6 0.0		7.0.0
17.5 0.424 8291 76552 6750 0.846 9373 33452 2846 0.367 38	9 14320	1237
16.0 0.132 4643 56340 0.643 0356 32607 0.305 95	9 14577	0
18.5 0.440 1092 0097 0.840 2751 2949 0.304 49	2	1202
-7594^{2} $+34^{197}$ $+$	14833	3
19.0 0.447 7034 75628 0.836 8554 34784 0.363 OI		,
19.5 0.455 2662	15211	LTOOL
20.0 0.402 7971 74086 0.829 8399 75051 0.359 97	1000	
20.5 0.470 2957 7.667 0585 0.820 2445 26625 3150 0.358 416	O TE845	1277
21.0 0.477 7014 0.822 5910 0.350 82	3 16096	
21.5 0.485 1937 73985 6526 0.818 8796 37690 3250 0.355 21	7 16346	
22.0 0.492 5922 73641 0.815 1106 38264 0.353 58	1 16595	
22.5 0.499 9563 73 ²⁹² 6466 0.811 2842 38836 3349 0.351 92		
3292	2 10043	,
23.0 0.507 2855 72937 6403 0.803 4600 394-6 3447 0.348 52	'3 ₁₇₀₉₀	1499
72578 + 39972 +	17337	
0.400 0.507 9.000	6	
01 r 0 r 00 0 r 00 1 6000 0 mor 400 r 400	1/502	L T 7 12
05 0 0 5 0 6 0 10 5 7 10 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	0 1/025	
25 5 0 542 2805 7400 6272 0 787 1222 41000 2640 0 241 44	10000	~ ~ 0 .
26 0 0 550 4082 (100)	10311	·
26 7 0 7 7 7 684 10/02 6205 0 7 7 8 6242 42/12 27 27 2 20 7 7 6	Q 1000*	
/5311	18791	1625
27.0 0.564 5995 69915 0.774 3018 43874 0.335 88		-100
27.5 0.571 5910 60574 0130 0.769 9144 4441 3829 0.333 97		1660
28.0 0.578 5424 0.765 4723 444-1 0.332 05	9	

Mittl.	Äquator	und	Mittl.	Äquinoktium	1913.0
--------	---------	-----	--------	-------------	--------

19	13	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. auf 1910.0
T. 11	0	_			+			+		
Juli	28.0	0.578 5424	59107		0.765 4723	44965		0.332 0529	19505	
	28.5	0.585 4531	68695	4-6065	0.760 9758	45506	+3922	0.330 1024	19739	+1707
	29.0	0.592 3226	68277		0.756 4252	46045		0.328 1285	19973	
	29.5	0.599 1503	57855	5992	0.751 8207	46580	4014	0.326 1312	20205	1747
	30.0	0.005 9358	57426		0.747 1627	47112		0.324 1107	20437	0.6
	30.5	0.612 6784	66992	5917	0.742 4515	47640	4105	0.322 0670	20667	1786
	31.0	0.019 3770	66554		0.737 6875	48165		0.320 0003	20895	
4	31.5	0.020 0330 6	66109	5841	0.732 8710	48688	4194	0.317 9108	21122	1825
Aug.		0.032 0439	65659		0.728 0022	49207		0.315 7986	21347	
	1.5	0.039 2098		57 ⁶ 3	0.723 0815	, ,	4282	0.313 6639		1863
			65205		-+-	49723			21571	
	2.0	0.645 7303	64746		0.718 1092	50235		0.311 5068	21794	
	2.5	0.052 2049	64281	+5683	0.713 0857	50743	1-4369	0.309 3274	22015	1-1901
	3.0	0.058 0330	01826		0.708 0114	51248		0.307 1259	22234	
	3.5	0.665 0140	60001	5602	0.702 8866	51747	1155	0.304 9025	22451	1938
	4.0	0.071 3474 6	6-0		0.697 7119	52243		0.302 6574	22666	
	4.5	0.077 0329	52250	5519	0.692 4876	52735	4540	0.300 3908	22879	1975
	5.0	0.083 8099	51880		0.687 2141	53222		0.298 1029	23090	
	5.5	0.690 0579	61386	5435	0.681 8919	537°5	4624	0.295 7939	23300	2011
	6.0	0.696 1965	50888		0.676 5214	54184		0.293 4639	23508	1
	6.5	0.702 2853		5349	0.671 1030	34104	4706	0.291 1131	-300	2047
		_ 6	50385			54659		+-	23714	
	7.0	0.708 3238	59879		0.665 6371	55131		0.288 7417	23918	
	7.5	O BY A OT YE	59368	+5262	0.660 1240	55598	- +4787	0.286 3499	24121	-1-2082
	8.0		58853		0.654 5642	56c60		0.283 9378	24321	
	8.5		58335	5173	0.648 9582	56518	4866	0.281 5057	24519	2116
	9.0	○ グクエ ひわ づつ	57812		0.643 3064	56972		0.279 0538	24716	
	9.5	0 707 7485	57285	5083	0.637 6092	57422	4944	0.276 5822	24910	2150
	10.0		56754		0.631 8670	57867		0.274 0912	25103	_
	10.5	O TAO TEGA	56220	4991	0.626 0803	58309	5020	0.271 5809	25295	2183
	11.0	07547744	55683		0.620 2494			0.269 0514	25484	
	11.5	0.760 3427	55003	4898	0.614 3747	58747	5095	0.266 5030	254°4	2216
			55141		+	59180		+	25672	
	12.0	0.765 8568			0.608 4567	59610		0.263 9358	25858	
	12.5	0.771 3165	54597	+4803	0.602 4957	60035	+5169	0.261 3500	25050	+2248
	13.0				0.596 4922			0.258 7459		
	13.5	0 782 0700	53496	4707	0.590 4466	60456 60873	5241	0.256 1235	26224	2279
	14.0	0 H8H 26F0	52941	., ,	0.584 3593	696	, 1-	0.253 4831	26404	,,,
	14.5	0 702 602T	52381	4610			5311	0.250 8248	26583	2310
	15.0	0 707 7850	21819		0.572 0612	61695	75-4	0.248 1488	26760	.524
	15.5	0	51252 50683	4511	0.565 8512	62100	5380		26936	2340
	. , , ,		OhX2	4)-1		harns)500	~ (CF CF)	27110	7)4

191	3	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z	Red. anf 1910.0
		-			-+			+	
Aug.		0.807 9785	50110		0.559 6011	62898		0.242 7442	82
	16.5	0.812 9895	49533	+4411	0.553 3113		+5448	0.240 0160	LAAMA
	17.0	0.817 9428	4 ⁸ 953		0.540 9023	626-0		0.237 2709 276	
	17.5	0.822 8381	48370	4310	0.540 0144	64064	5514	0.234 5089 277	2200
	18.0	0.827 6751	47782		0.534 2080	64444		0.231 7303 200	
	18.5	0.832 4533	47191	4207	0.527 7636	64820	5579	0.228 9352 281	
	19.0	0.837 1724	46597		0.521 2816	6= 102		0.226 1237 282	-6
	19.5	0.841 8321	45999	4104	0.514 7624	-	5642	0.223 2961 284	2454
	20.0	0.846 4320			0.508 2065	65022	-	0.220 4525 285	
	20.5	0.850 9717	45397	3999	0.501 6142	05923	5703	0.217 5932	2481
		_	44792		-4-	66283		+ 287	49
	21.0	0.855 4509			0.494 9859	666		0.214 7183 289	1
	21.5	0.859 8694	44185	1-3893	10.400 3222	11 00	I-F 5703	0 211 8280 209	1-1-2507
	22.0	0.864 2267	43573		0.481 6234	00985	. 5, 5	0.208 0224 -9	50
	22.5	0.858 5225	42958	2786	0.474 8900	07334	5821	0.206.0018 294	2522
	23.0	0.872 7564	42339		0.468 1224	0,0,0		0 000 0664 295	34
	23.5	0.876 9282	41718	2678	0.461 3210	00014	5877	293	
	24.0	0.881 0374	41092	3070	0.454 4864	00340	5-11	0 107 1516	47
	24.5	0.885 0838	40464	3569	0.447 6189	000/3	5932	0.194 1726	90 25 80
	25.0	0.889 0669	39831	3309	0.440 7190	00999	3934	0 707 7506 299	30
	25.5	0.892 9864	39195	2458	0.433 7872		5985	0.191 1790 300	68 2603
	~5.5	0.092 9004	38556	3458		69632	59°5		
	26.0	0.896 8420	٥٠٥٥٥		- 1 0.426 8240			- 3 ⁰² 0.185 1523	~J
	26.5	0.900 6334	37914		0.419 8298	09942	+6037	0.182 1183	40 -1-2626
	27.0		37268	+3347			1-0037		73
		0.904 3602	36618		0.412 8051		6.06	0.179 0710 306	03
	27.5	0.908 0220	35965	3 2 35	0.405 7504		6086	0.176 0107 307	2648
	28.0	0.911 6185	35309		0.398 6662			0.172 9375 308	58
	28.5	0.915 1494	34649	3122	0.391 5530	71417		0.169 8517 300	2668
	29.0	0.918 6143	33987	0	0.384 4113	/4090		0.166 7535 311	04
	29.5	0.922 0130	33321	3008	0.377 2417		6180	0.163 6431 312	2688
	30.0	0.925 3451	32652		0.370 0446			0.100 5208	30
	30.5	0.928 6103		2893	0.362 8206		6224	0.157 3869	2707
			31981		+	72504		314	54
	31.0	0.931 8084			0.355 5702			0.154 2415	66
~	31.5	0.934 9390	30628		0.348 2940	73013	1 6266	0.151 0049 216	+2725
Sept.		0.938 0018	29948		0.340 9927	72260		0.147 9173	-
	1.5	0.940 9966	29266	2001	0.333 6667	73501	10207	0.144 7390	2712
	2.0	0.943 9232	28581	i	0.326 3166	72726		0.141 5503	
	2.5	0.946 7813	27893	0714	0.318 9430	73736		0.138 3514 320	2710
	3.0	0.949 5706	27203		0.311 5464			0.135 1425 321	-
	3.5	0.952 2909	26512	2126	0.304 1275	/4109	6282	0.131 9239 322	a mms
	4.0	0.954 9421	20512		0.296 6868			0.128 6959	.00

Mittl.	Äquator	und	Mittl.	Äquinoktium	1913.0
--------	---------	-----	--------	-------------	--------

191	3	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. au 1910.0
Sant		-			+			+		
Sept.	4.0	0.954 9421	25818		0.296 6868	74619	. 6 0	0.128 6959	32371	Lawa
	4.5	0.957 5239	25123	+2307	0.289 2249	74826	+6418	0.125 4588	32461	-F279
	5.0	0.960 0362	24426	2100	0.281 7423	75027	6127	0.122 2127	32548	280
	5.5 6.0	0.96 2 4788 0.964 8517	23729	2188	0.274 2396 0.266 7175	75221	6451	0.118 9579	32632	200
	6.5	0.967 1546	23029	2068	0.259 1764	75411	6483	0.115 6947	32714	282
	7.0	0.969 3874	22328	2000	0.251 6169	75595	0403	0.109 1440	32793	
	7.5	0.971 5500	21626	1947	0.244 0396	75773	6512	0.105 8570	32870	283
	8.0	0.973 6422	20922	1947	0.236 4450	75946	0512	0.102 5625	32945	703
	8.5	0.975 6638	20216	1826	0.228 8337	76113	6539	0.099 2608	33017	284
	0.5		19510	1020	+	76276	0339	+	33087	204
	9.0	0.977 6148			0.221 2061		•	0.095 9521		
	9.5	0.979 4950	18802	+1704	0.213 5628	76433	4-6565	0.092 6367	33154	+285
	10.0	0.981 3043	18093		0.205 9043	76585	. , ,	0.089 3147	33220	
	10.5	0.983 0.425	17382	1582	0.198 2313	76730	6589	0.085 9864	33283	280
	11.0	0.984 7096	16671		0.190 5442	76871		0.082 6521	33343	
	11.5	0.986 3055	15959	1459	0.182 8435	77007	6611	0.079 3119	33402	207
	12.0	0.987 8300	15245	.,,,	0.175 1298	77137		0.075 9660	33459	
	12.5	0.989 2830	14530 13814	1336	0.167 4036	77262	6631	0.072 6148	33512	
	13.0	0.990 6644		33	0.159 6654	77382		0.069 2584	33564 33614	
	13.5	0.991 9741	13097	1213	0.151 9158	77496	6649	0.065 8970	33014	289
		_	12379		-+-	77604		+	3366 0	
	14.0	0.993 2120	11659		0.144 1554	77708		0.062 5310	33705	
	14.5	0.994 3779	10940	4-1089	0.136 3846	77807	-1-6665	0.059 1605	33748	I-I-280
	15.0	0.995 4719	10219		0.128 6039	77901		0.055 7857	33788	
	15.5	0.996 4938	9497	965	0.120 8138	77088	6679	0.052 4069	33827	
	16.0	0.997 4435	8773		0.113 0150	78071		0.049 0242	33863	
	16.5	0.998 3208	8048	841	0.105 2079	78148	6691	0.045 6379	33897	201
	17.0	0.999 1256	7323		0.097 3931	78220		0.042 2482	33928	
	17.5	0.999 8579	6598		0.089 5711	78286	6702		33956	2.01
	18.0	1.000 5177	5870		0.081 7425	78347		0.035 4598	339 ⁸ 3	
	18.5	1.001 1047		591	0.073 9078		0710	0.032 0615	_	291
			5141		+	78403		+	34008	
	19.0	1.001 6188	4413		0.066 0675	78454		0.028 6607	34030	,
	19.5	1.002 0601	3684		0.058 2221	78400	+6716		34049	-202
	20.0	1.002 4285	2954		0.050 3722	78528		0.021 8528	34066	
	20.5	1.002 7239	2222	211	0.042 5184	78571	6721		34082	
	21.0	1.002 9462	1490		0.034 6613	-8-00		0.015 0380	34095	
	21.5	1.003 0952	758	210	0.026 8014	78622			34105	2.02
	22.0	1.003 1710	24		0.018 9392	78645		0.008 2180	34112	
	22.5	1.003 1734	710	1- 00	0.0110752	78652	D725		34118	292
	23.0	1.003 1024	,		0.003 2100	, ,		0.001 3950		

1913	X	Red. auf 1910.0	Y		Red. auf 1910.0	Z	Red. auf 1910.0
Sont and			+			+	
Sept. 23.0		446	0.003 2100	78658		0.001 3950	
23.5	T 002 0578	25	0.004 6558		16-0.	0.002.0172	1-2021
2.1.0	1 002 7206	402	0.012 5217	78659		0.005 4205	
24.5	T 002 4177	919 655 160	0.020 3870	78653 78641	6720	0.008 8415 34116	2022
25.0	1.002 0822	202	0.028 2511	78624		0.012 2531	
25.5	1.001 0429	131 285	0.036 1135	78601	D/711	0.015 0039	7()7()
2 6.c	1.001 1298	870	0.043 9736	78572		0.019 0738 3408	
26.5	1.000 5428 6	608 410.	0.051 8308	78536	6 HOE	0.022 4825	2017
27.0		347	0.059 6844	78495		0.025 8896 34053	2070
27.5	0.999 1473	535	0.067 5339	78447	0097	0.029 2949	2913
2 8.0	0.008.0087		0.075 3786			0.032 6981	
28.5	0.007 456T	826 - 660	0.083 2179	78393	+6686	3400	+2908
29.0	0.006 4007	504	0.091 0511	78332		0.020 4072 3390	,
29.5	0.005 4604	785	0.098 8777	78266		0.042 8027 3393	2002
30.0	0001 2652	04.	0.106 6969	78192		< -0 339".	5
30.5	0.002 1872	780	0.114 5082	78113 78027		0 0 40 6 -0 33000	2895
Okt. 1.0	0.001.0256	253	0.122 3109	77935		0.053 0588 33830	,
1.5	0.990 6103	988 1034	0.130 1044	77838	65.11	0.056 4398 3376	2888
2.0	0.989 2115	723	0.137 8882	77724		0.059 0100 2277	2
2.5	0.987 7392	1158	0.145 6616		0022	0.003 1000	2000
		455	_	77623		3367	5
3.0	0 10	186	0.153 4239	775c6		0.066 5562	0
3.5	0.984 5751 16	916 -1282	0.161 1745	77384	+6600	0.069 9185 33560	1-2870
4.0	1 0 1/	645	0.168 9129 0.176 6384		6 rmm	0.073 2754 33513	2860
4.5 5.0	0.070.2817	373 1405	0.184 3504	//		0.076 6267 33454	1 2000
5.5	0.077.2718	1528	0.192 0484	76980		0.083 3114 33393	2849
6.0	0.075.2805.2	1023	0.199 7318	70034		0.086.6444 3333	
6.5	0.072.2240	1650 1650	0.207 4001	76683	6525	0.080 0708 33202	2037
7.0	0.071.2082	200	0.215 0526	76525	ĺ	0.002.2002 33193	
7.5	0.969 0097	986	0.222 6888	76362	6496	0.096 6027	2825
	22	703	_	76194		33050	
8.0		418	0.230 3082	76020		0.099 9077 32974	
8.5	0.964 3976	1893	0.237 9102	75840		0.103 2051 2,806	
9.0	0.961 9844	845	0.245 4942	75656		0.100 4947 32816	
9.5	0.959 4999 🚜	555 2014	0.253 0598	75465	D/122	0.109 7763	2.707
10.0	950 9444 36	264	0.260 6063	75270		0.113 0490 22648	3
10.5	0.954 3180 26	971 2134	0.268 1333	75060		0.110 3144	1 27X2
11.0	0.951 0209 27	677	0.275 6402	74862	(-(-	0.119 5704	
11.5	0.948 8532 28	379 2253	0.283 1264	74650	6361	0.122 8174	2.707
12.0	0.946 0153		0.290 5914			0.126 0553 323/5	

Mittl. Äquator	und	Mittl.	Äquinoktium	1913.0
----------------	-----	--------	-------------	--------

19	13	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. auf 1910.0
		_			-			-		
Okt.	12.0	0.946 0153	29080		0.290 5914	74433		0.126 0553	32285	
	12.5	0.943 1073	29779	-2372	0.298 0347	74210	+6322	0.129 2838	32188	+-2751
	13.0	0.940 1294	30476		0.305 4557	73983		0 700 5006	32089	
	13.5	0.937 0818	31171	2,190	0.312 8540	73750	6282	0.135 7115	31989	7777
	14.0	0.933 9647	31865		0.320 2290	73512		0.138 9104	31885	
	14.5	0.930 7782	32557	2607	0.327 5802	73268	6240	0.142 0989	31779	2714
	15.0	0.927 5225	33247		0.334 9070	73019		0.145 2768	31671	
	15.5	0.924 1978	33934	2724	0.342 2089	72765	6196	0.148 4439	31562	2695
	16.0	0.920 8044	34619		0.349 4854	72505		0.151 6001		
	16.5	0.917 3425	34019	2 840	0.356 7359	/4303	6150	0.154 7450	31449	2675
		-	35302		-	72241			31335	1
	17.0	0.913 8123	35984		0.363 9600	CLOSE		0.157 8785		
	17.5	0.910 2139	35974		0.371 1571	71971	+6102	0.161 0003	31218	
	18.0	0.906 5477	30002		0.378 3267			0.164 1102		
	18.5	0.902 8138	37339	2000	0.385 4683	/1410	6072	0.167 2080	30978	2022
	19.0	0.899 0124	38014		0.392 5814	/3-		0.170 2935	30855	_
	19.5	0.895 1437	30007	2182	0.399 6654	/0040	hoor	0.173 3664	30729	26 TC
	20.0	0.891 2080	39357		0.406 7198	70544		0.176 4265	30601	
	20.5	0.887 2054	40020	2201	0.413 7440	70242		0.179 4735	30470	1 7527
	21.0	0.883 1362	40692		0.420 7375	09933		0.182 5073	30338	
	21.5	0.879 0006		3405	0.427 6997		5893	0.185 5276	30203	2563
			42018	1		69305			30065	
	22.0	0.874 7988			0.434 6302			0.188 5341		
	22.5	0.870 5312	42676	-25 TO	0.441 5284	00902		0.191 5267	29926	1.1.2528
	23.0	0.866 1980	43334		0.448 3937	000033		0.194 5050	29783	1
	23.5	0.861 7994	43900		0.455 2256	00319	5778	0.197 4689	29639	2512
	24.0	0.857 3357	4103/		0.462 0235	0/9/9	'1	0.200 4180	29491	
	24.5	0.852 8071	45286	2722	0.468 7869	0/034	5718	0.203 3522	29342	1 2 1 8 7
	25.0	0.848 2139	45932	1	0.475 5152	0/203		0.206 2711	29189	,
	25.5	0.843 5565	405/4	2840	0.482 2079	0092/	5656	0.209 1746	29035	2 100
	26.0	0.838 8351	47214		0.488 8644	00303		0.212 0624	28878	'
	26.5	0.834 0500		3946	0.495 4841	66197	5592	0.214 9343	28719	2432
	-0.5	0.054 0500	48485		ידייד נקדיים	65824		3,2,4 9343	28557	
	27.0	0.829 2015			0.502 0665			0.217 7900		
	27.5	0.824 2900	47.1	4050	0.5086110	V5445			20393	
	28.0	0.819 3159	47/4		0.515 1170	05000		0.223 4519	20/220	,
	28.5	0.814 2795	20200	ATEA	0.521 5840	040/0			2005	
	29.0	0.809 1811		4134	0.528 0115	. 042/2)	0.229 0459	20,000	•
	29.5	0.804 0212	2159		0.534 3988	250/3	FOOT	0.231 8169	4//10	2211
	30.0	0.798 8001		4250		. " " " " " " " " " " " " " " " " " " "			2133	
				1057	0.540 7455	, v _j v _j ;	F037	0.234 5703	-/33.	
	30.5	0.793 5183		4357	0.547 0510		5321			231.
	31.0	0.788 1763	•		0.553 3149	,		0.240 0231		

19	13	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. au 1910.0
		_			_			_		
Okt.	31.0	0.788 1763	54019		0.553 3149	62217		0.240 0231	26990	
	31.5	0.782 7744	54612	4456	0.559 5366	61-80	+5249	0.242 7221	26804	+2283
Nov.	1.0	0.777 3132	55202	_	0.565 7155	61357		0.245 4025	26616	
	1.5	0.771 7930	55787	4554	0.571 8512	60919	5175	0.248 0641	26426	2251
	2.0	0.766 2143	56369		0.577 9431	60477		0.250 7067	26233	
	2.5	0.760 5774	56946	46FT	0.583 9908	60031	5100	0.253 3300	26039	2218
	3.0	0.754 8828	57517		0.589 9939	59580		0.255 9339	25844	
	3.5	0.749 1311	58084	4746	0.595 9519	59125	5023	0.258 5183	25646	218
	4.0	0.743 3227	58646		0.601 8644	58665		0.261 0829	25446	1
	4.5	0.737 4581	50040	4840	0.607 7309	50005	4945	0.263 6275	25440	215
			59203			58200		_	25244	}
	5.0	0.731 5378	59757		0.613 5509			0.266 1519	25041	
	5.5	0.725 5621	59/5/ 60306	-4933	0.619 3240	57731 57258	+4865	0.268 6560	24835	+2116
	6.0	0.719 5315	60849		0.625 0498	56780		0.271 1395	24627	
	6.5	0.713 4466	61388	5024	0.630 7278		4784	0.273 6022		208
	7.0	0.707 3078	61924		0.636 3577	56299 55813		0.276 0441	24419	
	7.5	0.701 1154	62454	5113	0.641 9390	33013	4701	0.278 4649	24208	204
	8.0	0.694 8700	62980		0.647 4713	333-3		0.280 8644	23995	
	8.5	0.688 5720	63500		0.652 9543	54030	4017	0.283 2425	23781	200
	9.0	0.682 2220	64017		0.658 3875	54332		0.285 5991	23566	
	9.5	0.675 8203	04017	5287	0.663 7706	53831	4532	0.287 9339	23348	197
			64529			53325		_	23128	1
	10.0	0.669 3674	65036		0.669 1031	52815		0.290 2467		
	10.5	0.662 8638	65537		0.674 3846		+4445	0.292 5374	22907	1-4-107
	11.0	0.656 3101	66035		0.679 6147	52301	_	0.294 8058	22684	
	11.5	0.649 7066	66527	5455	0.684 7930	51783 51262	4357	0.297 0518	22460	1.80
	12.0	0.643 0539	67015		0.689 9192	51202		0.299 2752	22234	
	12.5	0.636 3524	67497	5536	0.694 9929	50737	1208	0.301 4758	22006	TXE
	13.0	0.629 6027	67976		0.700 0137	50200		0.303 6536	21778	
	13.5	0.622 8051	68450	5615	0.704 9812	49675	4177	0.305 8083	21547	INT
	14.0	0.615 9601	68919		0.709 8952	48600		0.307 9397	21314	
	14.5	0.609 0682	08919	5693	0.714 7552	40000	4085	0.310 0478	21081	177
		_	69382		-	48057			20845	1
	15.0	0.602 1300	69842	1.41	0.719 5609			0.312 1323	(-0	,
	15.5	0.595 1458	0904-		0.724 3118	4/50%	1 2002		20608	1 1770
	16.0	0.588 1161	70297		0.729 0076	40930		0.316 2300	20369	,
	16.5	0.581 0414	70747	EX44	0.733 6480	40404		0.318 2429	20129	Tho
	17.0	0.573 9222	/1192		0.738 2325	45045		0.320 2316	19887	
	17.5	0.566 7590	/1032	EOT'7	0.742 7608	45203		0.322 1960	19644	105
	18.0	0.559 5523	1200/		0.747 2325	44/1/		0.324 1360	19400	,
	18.5	0.552 3025	1-470		0.751 6473	4414	270.1	0.326 0513	19153	161
	19.0	0.545 0102		37	0.756 0048	43575	37-7	0.327 9417	18904	

Mittl.	Äquator	und	Mittl.	Äquinoktium	1013.0
	9				1913.0

191	13	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. au f 1910.0
Nov.	10.0	- 0.545 0102			0.756 0048			- 0.327 9417		
1101.	19.5	0.537 6758	73344	6057	0.760 3046	42998	+2606	0	18654	+1568
	20.0	0.530 2999	73759	005/	0.764 5464		+3606	(10403	1 1300
	20.5	0.522 8830	74169	6124	0.768 7297	41033	3507	0 222 1622	18149	1525
	21.0	0.515 4256	74574	0124	0.772 8543	41246	330/	0 225 25 18	17895	1)4)
	21.5	0.507 9282	74974	6189	0.776 9197	40654	3407	0 227 0156	17638	1481
	22.0	0.500 3914	75368	0109	0.780 9255	4 ∞58	54~7	0 228 7527	17381	1401
	22.5	0.492 8157	75757	6253	0.784 8714	39459	2205	0 240 4608	17121	1437
	23.0	0.485 2018	76139	0455	0.788 7570	30050		0 242 1517	16859	1437
	23.5	0.477 5501	76517	6315	0.792 5820		3203	0.343 8113	16596	1202
	4 3.3	0.4// 5501	76888	03.3	0.792 3020	37640			16332	1393
	24.0	0.469 8613	/		0.796 3460			0045 4445		
	24.5	0.462 1359	77254	-6374	0.800 0487	3/02/	+3100	O CAR OFTO	16065	+ -1348
	25.0	0.454 3745	77614		0.803 6898		73100	0.348 6307	15797	1 13+0
	25.5	0.446 5777	77968		0.807 2689		2006	0.350 1834	15527	1202
	26.0	0.440 5///	78315		0.810 7855		2996		15257	1303
	26.5		78657		0.814 2394		4807	0.351 7091	14984	1057
		0.430 8805	78993	6487			2891	0.353 2075	14711	1257
	27.0	0.422 9812	79321	65.00	0.817 6303		250	0.354 6786	14436	2011
	27.5	0.415 0491	79642	6540	0.820 9579	32639	2785	0.356 1222	14159	1211
	28.0	0.407 0849	79958	6-00	0.824 2218		2600	0.357 5381	13882	6.
	28.5	0.399 0891	80266	6592	0.827 4218		2,678	0.358 9263	6	1164
	20.0					31359		- 260 2966	13603	
	29.0	0.391 0625	00509		0.830 5577	30715	10550	0.360 2866	13323	
	29.5	0.383 0056	00004		0.833 6292	30067	+2570	0.361 6189	13042	+1117
	30.0	0.374 9192	04455	660-	0.836 6359	* 44		0.362 9231	12760	
T\	30.5	0.366 8039	01454	6689	0.839 5777		2461	0.364 1991	12477	1070
Dez.	1.0	0.358 6605	81710	,	0.842 4544	28113		0.365 4468	12193	
	1.5	0.350 4895	81978	0/34	0.845 2657	27457	2352		11908	1023
	2.0	0.342 2917		C	0.848 0114	26708	3	0.367 8569	11623	
	2.5	0.334 0676	82496	0777	0.850 6912	26120	2242		11336	975
	3.0	0.325 8180		(0-0	0.853 3051	200	7	0.370 1528	11049	
	3.5	0.317 5435		0010	0.855 8528	•	2131	0.371 2577		927
			82987	7	0.0	24813	3		10761	
	4.0	0.309 2448	83223	3	0.858 3341	24148	3	0.372 3338	10472	
	4.5	0.300 9225	82.152	-6857	0.860 7489	22.8	1 4040		10183	I XTC
	5.0	0.292 5772	826-6	5	0.863 0970	2281	2	0.374 3993	9893	
	5.5	0.284 2096	8280		0.865 3782	2214	1908		9602	X20
	6.0	0.275 8204	8410	2	0.867 5929	20.47	L	0.376 3488	9310	
	6.5	0.267 4102	84200			່າຕາຄ	1705		9018	7.51
	7.0	0.258 9797	84500	2	0.871 819	1 2012	2	0.378 1816	8720	5
	7.5	0.250 5295	8469	6962		7 1011	1082	0.7	8433	1700
	8.0	0.242 0602			0.875 776	1		0.379 8975	- 70.	

19	13	X		Red. auf 1910.0	Y		Red. auf 1910.0	Z		Red. auf 1910.0
		=			_			_		
Dez.	8.0	0.242 0602	84876		0.875 7764	18769		0.379 8975	8139	
	8.5	0.233 5726	85053	-6992	0.877 6533	18090	+1568	0.380 7114	7845	+682
	9.0	0.225 0673	85224		0.879 4623			0.381 4959		
	9.5	0.216 5449	85389	7020	0.881 2033	17410 16729	1454	0.382 2509	755° 7254	633
	10.0	0.208 0060	85548	,	0.882 8762			0.382 9763	6959	33
	10.5	0.199 4512	85699	7047	0.884 4809	16047 15364	1339	0.383 6722	6663	583
	11.0	0.190 8813	02017	, , ,	0.886 0173	15304	00,	0.384 3385	6366	
	11.5	0.182 2968	85845	7071	0.887 4853	14000	1224	0.384 9751	6070	533
	12.0	0.173 6984	85984		0.888 8849	13996	'	0.385 5821		555
	12.5	0.165 0866	86118	7093	0.890 2159	13310	1109	0.386 1594	5773	483
			86244	1-75		12622			5475	4-3
	13.0	0.156 4622			0.891 4781			0.386 7069		
	13.5	0.147 8257	00303	-7113	0.892 6715	11934	+ 993	0.387 2246	5177	+ 433
	14.0	0.139 1778	86479	73	0.893 7959	*****	. 223	0.387 7125	4879	י לכדי
	14.5	0.130 5190	86588	7130	0.894 8513	10004	877	0.388 1704	4579	382
	15.0	0.121 8501	00009	7-30	0.895 8376	9863	9//	0.388 5984	4280	502
	15.5	0.113 1716	86785	7145	0.896 7548	91/2	761	0.388 9964	3980	222
	16.0	0.104 4841	000/5		0.897 6027	04/9	701	0.389 3644	3680	332
	16.5	0.095 7883	86958	7158	0.898 3812	1705	644	0.389 7023	3379	281
	17.0	0.087 0848	0/035	/150	0.899 0903	7091	944	0.309 /023	3079	201
	17.5	0.0870848	87106	7169	0.899 7298	6395	520	0.390 2879	2 777	220
	17.5	- 0.076 3742	87170		- 0.099 /290 	5699	527		2475	230
	18.0	0.069 6572	0 0		0.900 2997			0.390 5354		
	18.5	0.060 9344	0/220	7178	0.900 7999	5002	+ 410	0.390 7527	2173	+179
	19.0	0.052 2065	-1-13	' '	0.901 2302	4303		0.390 9398	1871	' '/
	19.5	0.043 4741	9/3~4	7185	0.901 5906	3004	293	0.391 0965	1567	128
	20.0	0.034 7380	7,30	, ,	0.901 8810	2904	/ / /	0.391 2228	1263	
	20.5	0.025 9987	0/393	7189	0.902 1014	2204	176	0.391 3187	959	77
	21.0	0.017 2569	-/4.0	, ,	0.902 2517	1503	1	0.391 3842	655	''
	21.5	0.008 5134	87435	7191	0.902 3318		+ 58	0.391 4192	350	+ 26
		+	87446		-	98		-	46	, ,
	22.0	0.000 2312	87450		0.902 3416	605		0.391 4238	260	
	22.5	0.008 9762	0/450	7190	0.902 2811		59	0.391 3978	200	- 25
	_	-1-	87446		-	1308		-	565	
	23.0	0.017 7208	87436		0.902 1503			0.391 3413	0	
	23.5	0.026 4644	0/430	-7187	0.901 9491	2012	T = 6	0.391 2542	871	— 76
	24.0	0.035 2063	0/419		0.901 6775	2/10		0.391 1366	1176	,
	24.5	0.043 9457	U/374	7182	0.901 3355	3420		0.390 9884	1482	127
	25.0	0.052 6820	0/303		0.900 9230	4***		0.390 8096	1788	/
	25.5	0.061 4144	0/2-4	7175	0.900 4401	40.09	410	0.390 6002	2094	178
	26.0	0.070 1421	0/2//		0.899 8869	3334		0.390 3602	2400	-/0
	26.5	0.078 8644	87223	7166	0.899 2633	0230	527	0.390 0897	2705	229
		0.087 5807	87163		0.898 5692	6941	5-7	0.389 7886	3011	9
	47.0	1 2:00/ 200/			10,090 3094		1	10.309 /000		1

Mittl.	Äquator	und	Mittl.	Äquinoktium 1913.0
113 1 0 0 1 .	xx qualtr	unu	111 1 0 0 1.	riquinontium 1913.0

1913	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. au 1910.0
)ez. 27.0	+ 0.087 5807 870		a.898 5692		0.389 7886	
27.5	0.087 5807 870	-7154	0.897 8049	- 644 - 644	0.389 4570 3510	-280
28.0	0.104 9920 866	936	0.890 9705	46	0.389 0949 2026	
28.5 29.0	0.113 0050 00	7140	0.800.0050	760	0.388 7023 4230	331
29.5	0.122 3702 86 0.131 0450 86	7124	0.804 0468	870	0 287 8260 4533	382
30.0	0.139 7094 06	044	0.892 9324	44	0.387 3424 5120	
30.5	10.140 302/ 86	7100	0.891 7483	992	0.386 8285	432
31.0 31.5	0.157 0041 86	7086	0.890 4946	1108	0.386 2843 5743 0.385 7100	482
ر٠٠ر		156	139		6044	404
32.0	0.174 2486 86	018	0.887 7788	17	0.385 1056 6345	
32.5	0.182 8504	-7063	0.886 3171	308 -1223	0.384 4711 6644	-532
33.0	10.191 4370 0	***	0.004 7003	008	0.383 8067 6944	- 9 -
33.5	10.200 0005	- 1/030	0.883 1865 166	1338	0.383 1123 7242 0.382 3881 7730	582
34.0 34.5	0.208 5655 85	7011	0.879 7808	1453	0.381 6342 7539	632

Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Dia.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Jan. 1.0 1.5 2.0	13 51 31.05 14 16 30.52 14 41 56.15	24 59.47 25 25.63	—13°34 6.7 16 18 49.9 18 50 47.8	-2 44 43.2 2 31 57.9	8.22331 8.22101 8.21878	-230 223	15 40.0 15 35.1 15 30.3
2.5 3.0	15 7 51.88 15 34 19.54	25 55.73 26 27.66	21 8 12.9 23 9 22.2	2 I 9.3	8.21662 8.21455	207	15 25.6 15 21.2
3·5 4.0	16 1 18.62 16 28 45.99	26 59.08 27 27.37 27 49.91	24 52 39.3 26 16 38.4	1 43 17.1 1 23 59.1 1 3 30.9	8.21257 8.21067	198 190	15 17.0 15 13.0
4.5 5.0	16 56 35.90 17 24 40.29	28 4.39 28 8.97	27 20 9.3 28 2 21.7	0 42 I2.4 -0 20 27.5	8.20886	171	15 9.2 15 5.7
5·5 6.0	17 52 49.26 18 20 51.99	28 2.73	28 22 49.2 -28 21 31.7	+0 1 17.5	8.20552 8.20398	-154	15 2.3 14 59.1
6.5 7.0	18 48 37.65 19 15 56.37	27 45.66 27 18.72 26 43.66	27 58 56.3 27 15 54.8	0 22 35.4 0 43 1.5 1 2 15.0	8.20254 8.20122	144 132 121	14 56.1 14 53.4
7.5 8.0 8.5	19 42 40.03 20 8 42.72 20 34 1.01	26 2.69 25 18.29	26 13 39.8 24 53 40.1	1 19 59.7 1 36 5.4	8.20001 8.19893 8.19800	108 93	14 50.9 14 48.7 14 46.8
9.0 9.5	20 34 1.01 20 58 33.85 21 22 22.32	24 32.84 23 48.47	23 17 34.7 21 27 7.6 19 24 2.8	1 50 27.1 2 3 4.8	8.19724 8.19667	76 57	14 45.2 14 44.1
10.0	21 45 29.29 22 7 59.04	23 6.97	17 10 1.6 14 46 40.2	2 14 1.2 2 23 21.4	8.19629 8.19614	- 15	14 43.3 14 43.0
11.0 11.5	22 29 56.95 22 51 29.22	21 57.91	-12 15 28.1 9 37 48.9	2 37 39.2	8.19624 8.19660	+ 10 36	14 43.2 14 43.9
12.0	23 12 42.69 23 33 44.62	21 13.47	6 54 59.9 4 8 13.8	2 42 49.0	8.19725	65 94	14 45.3 14 47.2
13.0 13.5	23 54 42.71 0 15 44.98	20 58.09 21 2.27 21 14.83	- I 18 40.6 + I 32 30.9	2 49 33.2 2 51 11.5 2 51 39.9	8.19943 8.20099	124 156 188	14 49.7 14 52.9
14.5	0 36 59.81	21 36.09	4 24 10.8 7 15 4.5	2 50 53.7 2 48 45.9	8.20287 8.20506	219 249	14 56.8
15.0	I 20 42.22 I 43 27.97	22 45.75	10 3 50.4	2 45 6.7 +2 39 42.6	8.20755 8.21032	277 +303	15 6.5 15 12.3
16.0 16.5	2 7 2.41 2 31 34.53	24 32.12 25 3 8.14	+15 28 39.7 18 0 56.2	2 32 16.5	8.21335 8.21662	3 ² 7 345	15 18.7 15 25.6
17.0 17.5 18.0	2 57 12.67 3 24 3.74	26 51.07 28 8.63	20 23 26.0 22 33 29.2 24 28 7.1	2 10 3.2 I 54 37.9	18.22204	357 364	15 33.0 15 40.7 15 48.6
18.5	3 52 12.37 4 21 39.72 4 52 22.40	29 27.35 30 42.68	24 28 7.1 26 4 6.9 27 18 10.8	1 35 59.8	8.23092	364 357	15 46.6 15 56.6 16 4.5
19.5 2 0.0	5 24 11.66 5 56 53.11	31 49.26 32 41.45 33 14.38	28 7 9.6 28 28 19.8	0 48 58.8 +0 21 10.2 -0 8 36.9	8.23790 8.24107	341 317 284	16 12.1 16 19.2
20.5	6 30 7.49	33 44'3"	28 19 42.9	0 0 30.9	8.24391	204	16 25.7

Im Meridian von Berlin.

n	tum nd ination	Mittlere Zeit	AR.	Halbe DurchgD. Sternzeit	Bew. in	Dekl.	Bew. in
- 101111	mation						
Lon	. 1 U	h m	14 6 52.25	+67.19	T40 AH	-15°17′ 1.7	9.00
e) illi.		7 23.7			129.37		-843.9
	0	19 47.8	14 32 58.38	+67.82	131.86	-17597.3	−775.I
	2 U	8 12.4	14 59 36.56	+68.54	134.69	-20 26 26.8	696. I
	0	20 37.5	15 26 49.81	+69.29	137.67	$-22\ 37\ 2.5$	-607.7
	3 U	9 3.3	15 54 38.48	±€9.99	140.54	-24 29 2.7	-510.3
	0	21 29.6	16 22 59.79	+70.60	143.05	$-26 \circ 45.3$	-405.0
	4 U	9 56.4	16 51 47.86	+71.06	144.93	-27 10 44.8	-293.4
	0	22 23.4	17 20 53.86	+71.28	145.96	-275757.7	-177.6
	5 U	10 50.6	17 50 6.53	+71.27	145.98	-28 21 48.0	— 6o.1
	0	23 17.6	18 19 13.40	~ - -70.99	144.94	-28 22 11.9	+ 56.3
	6 U	11 44.4	18 48 1.87	+70.47	142.87	-275938.8	+169.0
	-		-	-	_	-	
	7 0	0 10.7	19 16 20.46	-69.71	140.08	-27 15 7.8	+275.7
	U	12 36.3	19 43 59.84	-68.78	136.51	-26 10 2.6	+374.4
	8 0	I 1.2	20 10 53.44	-67.75	132.52	24 46 6.5	+463.9
	U	13 25.2	20 36 57.65	-66.65	128.33	-23 5 13.7	+543.7
	9 0	1 48.4	21 2 11.67	-65.56	124.19	-21 9 21.9	+613.7
	U	14 10.8	21 26 37.22	-64.51	120.28	—19 o 28.2	+674.0
	100	2 32.4	21 50 17.97	-63.55	116.74	—16 40 2 4.4	+725.4
	U	14 53.4	22 13 19.15	-62.73	113.68	-14 10 54.8	+768.4
		1 33 1	, 5 / 5	13	,	. ,,	•
	11 0	3 13.9	22 35 47.14	-62.06	111.18	—11 33 36.1	+803.8
	U	15 33.9	22 57 49.12	-61.57	109.33	— 8 49 56.1	+831.9
	12 0	3 53.6	23 19 32.95	-61.26	108.14	6 и 16.3	+853.7
	U	16 13.1	23 41 6.92	6 1.1 6	107.65	- 3 8 52.9	+869.2
	13 0	4 32.6	0 2 39.73	-61.27	107.92	- 0 I3 59.I	+878.8
	U	16 52.3	0 24 20.52	-61.61	108.95	+ 2 42 12.9	+882.2
	14 0	5 12.2	0 46 18.75	-62.16	110.80	+ 5 38 27.6	+879.1
	U	17 32.6	1 8 44.34	62.94	113.48	+83323.7	+869.0
	15 0	5 53.6	1 31 47.57	63.97	117.04	+11 25 30.1	+850.7
	U	18 15.5	1 55 38.95	-65.20	121.47	+14 13 2.3	+823.0
	16 0	6 38.3	2 20 29.06	66.66	126.79	+16 53 57.5	+784.1
	U	19 2.2	2 46 28.04	-68.29	132.93	+19 25 51.0	+732.3
	17 0	7 27.5	3 13 44.99	-70.06	139.75	+21 45 54.6	+665.3
	U	19 54.1	3 42 26.83	-71.89	147.02	+23 50 54.5	+581.2
	18 0	8 22.2	4 12 37.01	-73.71	154.40	+25 37 15.0	+478.5
	U	20 51.8	4 44 13.88	-75.39	161.41	+27 I 7.3	+356.4
	19 0	9 22.7	5 17 9.44	-76.8o	167.46	-1-27 58 45.1	+216.1
	U	21 54.6	5 51 8.64	-77.83	171.94	+28 26 44.7	+ 60.7
	20 0	10 27.2	6 25 49.61	-78.37	174.41	+28 22 32.6	-104.8
	U	23 0.1	7 0 46.01	78.39	174.61	+27 44 48.4	-273.4
		-5 011	/ 5 45.51	10.39	-/4.51	1 , 2/ 44 45.4	-/3-4

Dat	tum	W	ahr	AR.	Diff.	Wahre	De De	kl.	D	im.	Log. siı A. H. Pa		Ha	lbm.
Jan.	20.0	5	£6"	53.11	m s	- -2 8°2	Я' т	0.8	0	, ,	8.2410	7	16	19.2
e) all.	20.5	6	30	7.49	33 14.38	28 1			-0	8 36.9	8.2439			25.7
	21.0		_	32.63	33 25.14	27 4		- 1	0 3	9 21.6	8.2463			31.2
	21.5	7	3	_	33 13.29				I	9 54-4	8.2483		16	_
	_	8	-	45.92	32 41.18	26 3		-	13	9 3.2			16	55.
	22.0		_	27.10	31 53.23	24 5	•	· .	2	5 44.7	8.2497			37
	22.5	8		20.33	30 55.05	22 4		- 1	2 2	9 10.8	8.2506		1	41.1
	23.0			15.38	29 52.30	20 1			2 4	8 50.1	8.2509			4 r.8
	23.5		42	7.68	28 49.87	17 2				4 28.0	8.2506	04		41.2
	24.0			57.55	27 51.70	14 2	_	-	3 1	6 3.9	8.2498		16	39.2
	24.5	10	38	49.25	27 0.47	II	7	6.2	-3 2	3 47.1	8.2484	-185	16	36. t
	25.0	II	5	49.72		+74	12 I	Q. I			8.2466	3	16	31.9
	25.5		32	7.59	26 17.87		.5 [5 2			7 53.5	8.2443	7 220		26.7
	26.0	11	57	52.38	25 44.79	+ 0 4	_	- 1		8 42.0	8.2417	Q 259	1	20.8
	26.5			13.91	25 21.53		39 4	-		6 31.9	8.2389	2.00		14.4
	27.0		_	21.84	25 7.93	6	I 2		_	1 41.2	8.2358	305	16	7.6
	27.5			25.37	25 3.53	9 1		6.4	-	4 26.9	8.2327	T 310	16	0.6
	28.0			32.93	25 7.56	12, 2			3	5 2.5	8.2295			53.5
	28.5	14	_	0 / 0	25 19.11	15	_		2 5	3 39.2	8.2262	321	1	46.5
	29.0		_	52.04 28.92	25 36.88	_			2 4	p 26.3	8.2231	314	_	
	_			28.28	25 59.36			4.4	2 2	5 31.3	8.2201	304	-	39·7
	2 9.5	14	55	20.20	26 24.65	20 2	40 3	5.7	-2	9 2.2	0.4401	-291	15	33.1
	30.0	15	2 T	52.93	26 50.73	-22 2	29 3	7.9	1 5	7.4	8.2172	0 275	15	2 6.9
	30.5	15	48	43.66	27 15.21	24 2	20 4	5.3			8.2144	5	15	21.0
	31.0	16	15	58.87	, -	25	52 4	2.I		31 56.8	8.2118	8 257	15	15.6
	31.5	16	43	34.63	27 35.76	27	4 2	5.8		1 43.7	8.2095	I 237	15	10.6
Febr	'. I.O	1		24.73	27 50.10	27		- 1		50 44.3	8.2073	2 210	15	6.0
	1.5	17		21.12	27 56.39	28				29 17.7	8.2053	ر 190	15	1.9
	2.0	18	-	14.54	27 53.42		32 Ι			7 45.7	8.2035	7		58.2
	2.5	18		55.29	27 40.75	28		2 2		13 28.1	8.2019	8 159		55.0
	3.0	19	-	14.12	27 18.83	27		-	0 3		8.2005	8 140		52.1
	3.5		29	2.93	26 48.81	26		5.0	0 5	53 37.7	8.1993		1 -	49.6
	2,2	1	~9	4.93	26 12.45		3.	5.0	+1	11 56.4	,,,	-105	14	49.0
	4.0	19	55	15.38	25 31.81	-25	39	8.6	τ.	28 47.0	8.1983	I 87	14	47.5
	4.5	20	20	47.19	24 49.05	24	10 2	21.6		14 1.4	8.1974	4 '	14	45.7
	5.0	20	45	36.24	24 49.05		26 2				8.1967	3 71	14	44.2
	5.5	21		42.45		20	28 4	14.3		57 35.9	8.1961	8 55	14	43.1
	6.0	21	-		23 25.04		19 I			9 30.4	8.1958			42.3
	6.5	21	55		22 47.02		59 2			19 46.5	8.1956	0	14	41.9
	7.0	22			22 13.34		30 5			28 28.0	8.1955	6 - 4		41.8
	7.5	22	39	, ,	21 44.89		55 1	-		35 39-7	8.1957	0 1 14		42.1
	8.0	23	-	15.08	21 22.34		13 s			41 25.4	8.1960	13 33		42.8
	8.5	_		21.28	21 6.20		-5 28	4.3	2 .	45 50.0	8.1965	2 62		43.9
	2.5	1-3	-44				_, _,	т.Э			1 905		1.4	ליכד

Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe DurchgD. Sternzeit	Bew. in 1 ^h Länge	Dekl.	Bew. in 1 ^h Lange
Jan. 20 0	10 27.2	6 ^h 25 ⁿ 49.61 7 0 46.01	- 78.37	174.41	+28°22 32.6	- 104.8
21 0	23 0.1	7 0 46.01	-78.39 -77.88	174.61	+27 44 48.4 $+26$ 33 38.2	-273.4 -437.9
21 0	11 32.0	7 35 31.09	77.00	1/2.02	20 33 30.2	45/.9
22 U	0 4.9	8 9 40.29	76.96	168.78	+24 50 37.8	- 590.6
0	12 36.1	8 42 54.72	+75.73	163.43	+22 38 42.3	- 726.I
23 U	I 6.2	9 15 2.72	+74.32	157.58	+20 1 43.1	- 840.6
0	13 35.1	9 45 59-57	+72.87	151.64	+17 4 5.4	— 932.3
24 U	2 2.8	10 15 46.62	+71.47	146.02	+13 50 26.5	-1000.8
O	14 29.5	10 44 29.59	+70.22	141.04	+10 25 18.5	-1047.2
25 U	2 55.2	11 12 17.28	+69.17	136.86	+ 6 52 58.5	—I073.I
0	15 20.2	11 39 20.08	+68.34	133.61	+ 3 17 20.4	-1080.5
26 U	3 44.7	12 5 49.19	+67.75	131.30	- o 18 5.0	-1071.2
0	16 8.7	12 31 55.93	+67.41	129.91	- 3 50 9.5	-1047.2
27 U	4 32.6	12 57 51.18	+67.30	129.42	- 7 16 5.6	1010.0
0	16 56.5	13 23 45.23	+67.40	129.74	—10 33 23.7	- 96 1 .0
28 U	5 20.5	13 49 47.30	+67.68	130.77	-1339479	901.1
0	17 44.7	14 16 5.40	+68.12	132.41	$-16\ 33\ 12.9$	- 831.1
29 U	6 9.4	14 42 45.89	+68.68	134.51	19 11 41.9	- 751.8
0	18 34.5	15 9 53.21	+69.29	136.87	-21 33 25.8	— 663.7
30 U	7 0.0	15 37 29.49	+69.90	139.28	-23 36 43.3	- 567.5
0	19 26.1	16 5 34.06	+70.46	141.53	$-25\ 20\ 3.1$	— 464.2
31 U	7 52.5	16 34 3.55	+70.90	143.37	-26 42 6.8	- 355.0
0	20 19.2	17 2 51.66	+71.19	144.58	-274152.9	- 241.6
Febr. 1 U	8 46.2	17 31 49.77	+71.26	144.97	-28 18 42.2	- 125.8
o	21 13.1	18 0 47.44	+71.08	144.45	-28 32 20.2	_ IO.I
2 U	9 39.8	18 29 33.42	+70.68	142.99	-28 23 1.4	+ 103.3
0	22 6.2	18 57 56.88	+70.04	140.67	-275125.8	+ 212.3
3 U	10 32.0	19 25 48.14	+69.22	137.62	$-26\ 58\ 39.0$	+ 314.8
0	22 57.2	19 52 59.70	+68.26	134.06	-25 46 7.3	+ 409.5
4 U	11 21.6	20 19 26.48	+67.22	130.18	-24 15 30.2	+ 495.5
0	23 45.2	20 45 6.04	+66.14	126.21	$-22\ 28\ 37.2$	+ 572.1
5 U	12 8.0	21 9 58.33	4-65.07	122.33	-20 27 21.6	+639.3
_	_	-	_	_	-	_
6 0	0 30.1	21 34 5.37	-64.07	118.86	-18 13 35.0	+ 697.3
U	12 51.5	21 57 30.94	-63.17	115.60	-15496.3	+ 746.3
7 0	I 12.3	22 20 20.05	-62.39	112.79	-13 15 39.6	+ 787.0
U	13 32.6	22 42 38.76	-61.77	110.51	—10 34 52. 0	+ 819.8
8 0	I 52.5	23 4 33.77	-61.31	108.82	— 7 48 15.4	+ 845.3
U	14 12.1	23 26 12.34	-61.03	107.75	- 4 57 1 6.4	+ 863.7

Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Febr. 8.0	23 ^h 1 ^m 15.08	m s 21 6.20	- 8° 13 ['] 54.3	n / //	8.19603	1	14 42.8
8.5	23 22 21.28		5 28 4.3	+2 45 50.0	8.19656	+ 53	14 43.9
9.0	23 43 18.16	20 56.88	- 2 39 7.4	2 48 56.9	8.19731	75	14 45.4
9.5	0 4 12.88	20 54.72 21 0.01	+ 0 11 40.7	2 50 48.1 2 51 24.2	8.19828	97	14 47.4
10,0	0 25 12.89	21 13.03	3 3 4.9	2 50 44.4	8.19948	146	14 49.8
10.5	0 46 25.92	21 34.04	5 53 49-3	2 48 45.7	8.20094	171	14 52.8
11.0	1 7 59.96	22 3.25	8 42 35.0	2 45 45.7	8.20265	197	14 56.3
11.5	1 30 3.21	22 40.79	11 27 57.2	2 40 26.5	8.20462	222	15 0.4
12.0	1 52 44.00	23 26.62	14 8 23.7	2 33 48.1	8.20684	248	15 5.0
12.5	2 16 10.62	23 20.02	16 42 11.8	2 33 40.1	8.20932	-40	15 10.2
		24 20.42		+2 25 14.6	_	1 -273	
13.0	2 40 31.04	25 21.44	+19 7 26.4	2 14 31.8	8.21205	296	15 16.0
13.5	3 5 52.48	26 28.40	21 21 58.2	2 1 24.5	8.21501	317	15 22.2
14.0	3 32 20.88	27 39.17	23 23 22.7	1 45 39.1	8.21818	335	15 29.0
14.5	4 0 0.05	28 50.74	25 9 1.8	1 27 5.5	8.22153	347	15 36.2
15.0	4 28 50.79	29 59.29	26 36 7.3	1 5 40.1	8.22500	354	15 43.7
15.5	4 58 50.08	31 0.34	27 41 47.4	0 41 30.2	8.22854	356	15 51.4
16.0	5 29 50.42	31 49 23	28 23 17.6	+0 14 56.5	8.23210	352	15 59.2
16.5	6 1 39.65	32 21.99	28 38 14.1	-0 13 26.3	8.23562	338	16 7.0
17.0	6 34 1.64	32 36.04	28 24 47.8	0 42 50.1	8.23900	318	16 14.6
17.5	7 6 37.68		27 41 57.7		8.24218	_	16 21.7
0		32 30.87		-1 12 16.8		+288	
18.0	7 39 8.55	32 8.12	+26 29 40.9	1 40 46.0	8.24506	250	16 28.3
18.5	8 11 16.67	31 31.22	24 48 54.9	2 7 20.0	8.24756	205	16 34.0
19.0	8 42 47.89	30 44.69	22 41 34.9	2 31 10.2	8.24961	153	16 38.7
19.5	9 13 32.58	29 53.32	20 10 24.7	2 51 39.7	8.25114	96	16 42.2
20.0	9 43 25.90	29 1.53	17 18 45.0	3 8 24.4	8.25210	+ 35	16 44.4
20.5	10 12 27.43	28 12.86	14 10 20.6	3 21 12.5	8.25245	- 26	16 45.2
21.0	10 40 40.29	27 30.00	10 49 8.1	3 30 1.8	8.25219	87	16 44.6
21.5	11 8 10.29	26 54.70	7 19 6.3	3 34 58.0	8.25132	145	16 42.6
22.0	11 35 4.99	26 27.94	3 44 8.3	3 36 12.4	8.24987	198	16 39.3
22.5	12 1 32.93		+ 0 7 55.9		8.24789	ı i	16 34.8
		26 10.08		-3 33 59.8	0	-246	-(
23.0	12 27 43.01	26 1.07	— 3 26 3.9	3 28 36.7	8.24543	285	16 29.2
23.5	12 53 44.08	26 0.39	6 54 40.6	3 20 20.5	8.24258	317	16 22.7
24.0	13 19 44.47	26 7.20	10 15 1.1	3 9 28.0	8.23941	340	16 15.5
24.5	13 45 51.67	26 20.37	13 24 29.1	2 56 15.6	8.23601	354	16 7.9
25.0	14 12 12.04	26 38.42	16 20 44.7	2 40 58.2	8.23247	362	16 0.0
25.5	14 38 50.46	26 59.53	19 1 42.9	2 23 50.7	8.22885	361	15 52.1
26.0	15 5 49.99	27 21.65	21 25 33.6	2 5 8.5	8.22524	354	15 44.2
26.5	15 33 11.64	27 42.54	23 30 42.1	1 45 6.9	8.22170	342	15 36.5
27.0	16 0 54.18	27 59.87	25 15 49.0	1 24 3.3	8.21828	324	15 29.2
2 7.5	16 28 54.05		26 39 52.3		8.21504		15 22.3

Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg. D. Sternzeit	Bew. in 1 ^h Länge	Dekl.	Bew. in I ^h Länge
Febr. 8 0	1 52.5	23 4 33.77	-61.31	108.82	- 7°48′ 15.4	+ 845.3
U	14 12.1	23 26 12.34	61.03	107.75	— 4 57 16.4	+ 863.7
9 0	2 31.6	23 47 42.21	-60.95	107.34	-2316.8	+ 875.3
$\frac{U}{c}$	14 51.0	0 9 11.40	-61.07	107.62	+ 0 52 23.0	+ 880.3
10 0	3 10.6	0 30 48.32	-61.40	108.60	+ 3 48 23.6	+878.8
U	15 30.5	0 52 41.68	-61.94	110.32	+64325.3	+ 870.3
11 0	3 50.8	1 15 0.48	-62.70	112.82	+ 9 36 1.5	+854.5
U	16 11.6	1 37 54.07	-63.66	116.10	+12 24 40.1	+ 830.5
12 0	4 33.2	2 1 31.95	-64.84	120.17	+15 7 38.4	+ 797.5
U	16 55.7	2 26 3.51	<u>-66.2</u> 0	125.01	+17 43 0.2	+ 754.4
13 0	5 19.2	2 51 37.73	-67.72	130.58	+20 8 33.1	+ 699.0
U	17 43.9	3 18 22.65	-69.37	136.76	+22 21 46.0	+ 630.4
14 0	6 9.9	3 46 24.41	-71.08	143.34	+24 19 48.7	+ 547.0
-U	18 37.3	4 15 46.23	-72.77	150.05	+25 59 33.8	+ 447.3
15 0	7 5.9	4 46 27.21	-74.35	156.48	+27 17 44.1	+ 331.0
U	19 35.7	5 18 21.22	-75.72	162.17	+28 11 2.0	+ 198.7
16 0	8 6.6	5 51 16.33	76.76	166.63	+28 36 25.9	+ 52.4
U	20 38.2	6 24 55.08	-77.39	169.44	+28 31 30.3	103.9
17 0	9 10.1	6 58 56.04	-77.57	170.36	+27 54 44.4	— 2 65.1
U	21 42.1	7 32 56.18	-77.30	169.39	+26 45 46.6	- 424.7
				, -,		
18 0	10 13.7	8 6 33.96	-76.62	166.75	+-25 5 31.5	— <u>5</u> 76.8
U	22 44.6	8 39 31.84	-75.65	162.86	+22 56 5.6	-715.7
19 0	11 14.6	9 11 37.83	74.50	158.21	+20 20 34.9	- 836.9
U	23 43.7	9 42 45.90	-73.27	153.31	+17 22 50.I	- 937.6
20 0	12 11.8	10 12 55.60	72.07	148.55	+14 7 8.0	-1016.2
21 U	-	- 10 10 TO MH		-	-	TOTA 4
0	0 39.0	10 42 10.77	+70.98	144.09	+10 37 56.5	—1072.4 —1106.6
22 U	13 5.4	11 10 38.40	+70.07 +69.36	140.49	+ 6 59 42.8	
0	1 31.2		+68.88	137.71	+ 3 16 44.3	—1119.9 —1113.8
· ·	13 56.5	12 5 48.00	-1-00.00	135.77	— o 26 56.3	_
23 U	2 21.5	12 32 50.29	+68.62	134.70	− 4 7 35·4	-1089.8
0	14 46.4	12 59 44.44	+68.58	134.45	- 7 41 48.3	-1049.7
24 U	3 11.3	13 26 39.86	+68.73	134.93	—II 6 30.9	- 994.9
0	15 36.3	13 53 44.83	+69.06	136.05	—14 18 55.7	- 927.0
25 U	4 1.6	14 21 6.25	+69.51	137.67	-17 16 34.0	- 847.3
0	16 27.3	14 48 49.14	+70.04	139.61	-195712.5	— 757. 1
26 U	4 53.4	15 16 56.24	+70.60	141.69	-22 18 53.3	- 657.9
0	17 19.8	15 45 27.81	+71.13	143.64	-24 19 56.5	- 550.9
27 U	5 46.7	16 14 21.23	+71.56	145.28	-25 58 58.5	— 437.9
0	18 13.8	16 43 31.23	+71.83	146.34	-27 14 57.7	— 32 0.7

Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Febr. 27.0	16 0 54.18	m s	-25 15 49.0	0 1 11	8.21828		15 29.2
27.5	16 28 54.05	27 59.87	26 39 52.3	1 24 3.3	8.21504	-324	15 22.3
28.0	16 57 5.48	28 11.43	27 4 2 9.1	1 2 16.8	8.21200	304	15 15.9
28.5	17 25 20.95	28 15.47	28 22 17.3	0 40 8.2	8.20920	280	15 10.0
März 1.0	17 53 31.71	28 10.76	28 40 16.5	-0 17 59.2	8.20666	254	15 4.6
1.5	18 21 28.60	27 56.89	28 36 28.2	+0 3 48.3	8.20439	227	14 59.9
2.0	18 49 2.80	27 34.20	28 11 34.6	0 24 53.6	8.20239	200	14 55.8
2.5	19 16 6.62	27 3.82	27 26 35.5	0 44 59.1	8.20066	173	14 52.2
3.0	19 42 33.95	26 27.33	26 22 45.9	1 3 49.6	8.19920	146	14 49.2
3.5	20 8 20.66	25 46.71	25 1 30.8	1 21 15.1	8.19801	119	14 46.8
3 3		25 3.98	, 54.1	-I-1 37 8.7	. , .	- 94	' '
4.0	20 33 24.64	24 21.08	-23 24 22.1	1 51 26.7	8.19707	70	14 44.9
4.5	20 57 45.72	•	21 32 55.4	2 4 8.9	8.19637	48	14 43.5
5.0	21 21 25.43	23 39.71	19 28 46.5		8.19589		14 42.5
5.5	21 44 26.69	23 1.26	17 13 30.1	2 15 16.4	8.19564	25	14 42.0
6.0	22 6 53.56		14 48 38.4	2 24 51.7	8.19559	- 5	14 41.9
6.5	22 28 50.97	21 57.41	12 15 40.4	2 32 58.0	8.19572	+ 13	14 42.1
7.0	22 50 24.46	21 33.49	9 36 2.1	2 39 38.3	8.19603	31	14 42.8
7.5	23 11 40.07	21 15.61	6 51 6.9	2 44 55.2	8.19650	47	14 43.7
8.0	23 32 44.19	21 4.12	4 2 16.2	2 48 50.7	8.19715	65 81	14 45.0
8.5	23 53 43.44	20 59.25	— I IO 50.4	2 51 25.8	8.19796	01	14 46.7
		21 1.29		+2 52 40.6		+ 96	
9.0	0 14 44.73	21 10.42	+ 1 41 50.2	2 52 33-5	8.19892	112	14 48.7
9.5	0 35 55.15	21 26.75	4 34 23.7	2 51 2.1	8.20004	129	14 51.0
10.0	0 57 21.90	21 50.44	7 25 25.8	2 48 2.5	8.20133	146	14 53.6
10.5	1 19 12.34	22 21.55	10 13 28.3	2 43 28.7	8.20279	161	14 56.6
11.0	1 41 33.89	22 59.95	12 56 57.0	2 37 13.9	8.20440	177	15 0.0
11.5	2 4 33.84	23 45.36	15 34 10.9	2 29 9.4	8.20617	196	15 3.7
12.0	2 28 19.20	24 37.21	18 3 20.3	2 19 5.8	8.20813	214	15 7.7
12.5	2 52 56.41	25 34.40	20 22 26.1	2 6 53.3	8.21027	231	15 12.2
13.0	3 18 30.81	26 35.35	22 29 19.4	1 52 23.0	8.21258	248	15 17.1
13.5	3 45 6.16		24 21 42.4		8.21506		15 22.4
		27 37.84		-1 -1 35 27.8	0	+265	0 -
14.0	4 12 44.00	28 38.94	+25 57 10.2	1 16 5.8	8.21771	278	15 28.0
14.5	4 41 22.94	29 35.26	27 13 16.0	0 54 21.2	8.22049	290	15 33.9
15.0	5 10 58.20	30 23.11	28 7 37.2	0 30 26.8	8.22339	300	15 40.2
15.5	5 41 21.31	30 59.15	28 38 4.0	+0 4 45.3	8.22639	305	15 46.7
16.0	6 12 20.46	31 20.79	28 42 49.3	-0 22 10.2	8.22944	306	15 53.4
16.5	6 43 41.25	31 26.82	28 20 39.1	0 49 39.6	8.23250	301	16 0.1
17.0	7 15 8.07	31 17.62	27 30 59.5	1 16 57.9	8.23551	290	16 6.8
17.5	7 46 25.69	30 55.16	26 14 1.6	1 43 18.7	8.23841	272	16 13.3
18.0	8 17 20.85	30 22.48	24 30 42.9	2 7 59.6	8.24113	248	16 19.4
18.5	8 47 43.33		22 22 43.3		8.24361		16 25.0

Im Meridian	ı von Berlin.
-------------	---------------

Im Meridian von Berlin.											
Datum und Kulmination	Mittlere Zeit	AR.	Halbe DurchgD, Sternzeit	Bew. in 1 ^h Lange	Dekl.	Bew. in 1 ^h Länge					
Febr. 27 U	5 46.7 18 13.8	10 14 21.23 16 43 31.23	+71.56 +71.83	145.28 146.34	$-25^{\circ}58^{'}58^{'}58^{''}5$ -27 14 57.7	-437.9 -320.7					
28 U O	6 41.0	17 12 50.03	+71.90	146.67	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-201.4 -82.1					
März i U	7 35.4	17 42 7.99 18 11 14.57	+71.76 +71.38	146.14	-28 40 21.9	-+ 35.0					
0 2 U	20 2.I 8 28.3	18 39 59.29	+70.77 +69.97	142.47	28 22 4.8 27 41 50.2	+147.6 $+254.2$					
0 3 U	20 53.8 9 18.6	19 35 47.29	+69.02 +67.97	136.01	-26 41 0.0	+353.3 +444.0					
3 0	21 42.6	20 2 37.69 20 28 41.07	+66.87	132.16	$-25 \ 21 \ 9.8$ $-23 \ 44 \ 3.3$	+525.9					
4 <i>U</i>	10 5.9	20 53 56.95	+65.78	124.27	-21 51 28.5	+598.7					
0 5 <i>U</i>	22 28.4 10 50.1	21 18 26.92 21 42 14.17	+-64.72 +-63.75	120.56	-19 45 13.9 -17 27 4.8	+662.6 $+717.8$					
0 6 U	23 10.9	22 5 23.30	+62.90 +62.18	114.25	-14 58 43.7 $-12 21 47.9$	+764.7 +803.6					
0	11 31.8 23 52.0	22 27 59.87 22 50 10.12	+61.61	109.89	- 9 37 51.0	-+834.9					
$\frac{7}{-}^{U}$	12 11.8	23 12 0.81	+61.23	108.63	— 6 48 23 .0	+858.8					
8 <i>0 U</i>	0 31.4	23 33 39.11 23 55 12.48	-61.01 -61.00	107.89	- 3 54 50.5 - 0 58 39.2	+875.6 +885.2					
9 0	1 10.5	0 16 48.59	-61.18	108.32	+ 1 58 45.6	+887.7					
U	13 30.2	0 38 35.39	61.55	109.53	+ 4 55 56.6	+883.0					
10 <i>O U</i>	1 50.3	I 0 40.94 I 23 I3.57	-62.13 -62.91	111.43	+ 7 51 24.6 +10 43 33.9	+870.4 +849.7					
11 <i>O U</i>	2 31.9 14 53.8	1 46 21.64 2 10 13.42	63.87 65.02	117.31 121.27	+13 30 42.6 +16 10 59.6	+820.1 +780.9					
12 0	3 16.5	2 34 56.86	-66.32	125.89	+18 42 22.7	+731.0					
13 O	15 40.1 4 4.9	3 0 39.23 3 27 26.41	-67.75 -69.27	131.05	+21 2 37.9 $+23$ 9 17.6	+669.3 +594.8					
U	16 30.8	3 55 22.28	−70.81	142.46	+24 59 43.6	-1-506.7					
14 <i>O U</i>	4 57.8 17 2 6.0	4 24 27.79 4 54 40.12	-72.30 -73.65	148.21 153.56	+26 31 8.2 +27 40 42.5	+404.5 +288.4					
15 <i>O</i> <i>U</i>	5 55.1	5 25 52.07	-74.79	158.12	+28 25 45.0	+159.4 + 19.8					
16 0	18 25.1 6 55.5	5 57 51.99 6 30 24.29	-75.62 -76.08	161.53	+28 43 54.2 +28 33 22.1	126.9					
17 O	19 26.2 7 56.9	7 3 11.02 7 35 53.71	-76.17 -75.88	163.98 162.94	+27536.9 +26431.3	-276.5 -424.5					
18 O	20 27.2	8 8 15.65	-75.28	160.61	+25 3 54.3	-566.r -696.q					
U	8 57.0	9 11 8.80	-74.45 -73.47	157.37	+22 57 29.0 +20 26 14.2	-813.7					
					-						

März 18.0 18.5 19.0	8 ^h 17 ^m 20.85 8 47 43.33 9 17 26.75	m # 30 22.48	+24 30 42.9				
18.5	8 47 43.33 9 17 26.75	30 22.48		0 1 11	8.24113		16 19.4
19.0	9 17 26.75		22 22 43.3	-2 7 59.6	8.24361	1-248	16 25.0
		29 43.42	19 52 19.1	2 30 24.2	8.24578	217	16 29.9
	9 46 28.47	29 1.72	17 2 16.7	2 50 2.4	8.24755	177	16 34.0
20.0	10 14 49.34	28 20,87	13 55 44.4	3 6 32.3	8.24888	133	16 37.0
20.5	10 42 33.01	27 43.67	10 36 5.8	3 19 38.6	8.24971	83	16 38.9
2,1.0	11 9 45.28	27 12.27	7 6 52.9	3 29 12.9	8.25000	+ 29	16 39.6
21.5	11 36 33.38	26 48.10	+ 3 31 41.9	3 35 11.0	8.24974	— 26	16 39.0
22.0	12 3 5.40	26 32.02	- 0 5 50.8	3 37 32.7	8.24891	83	16 37.1
22.5	12 29 29.73	26 24.33	3 42 13.4	3 36 22.6	8.24754	137	16 34.0
)9-73	26 24.88	2 42-1	-3 31 48.2	1/31	-188	
23.0	12 55 54.61	26 33.08	- 7 14 1.6	3 23 58.7	8.24566	234	16 29.7
23.5	13 22 27.69	26 48.03	10 38 0.3	3 23 50./	8.24332	274	16 24.3
24.0	13 49 15.72	27 8.33	13 51 6.9	2 59 26.1	8.24058		16 18.1
24.5	14 16 24.05		16 50 33.0		8.23751	307	16 11.3
25.0	14 43 56.24	27 32.19	19 33 46.7	2 43 13.7	8.23420	331	16 3.9
25.5	15 11 53.69	27 57-45 28 21.66	21 58 34.4	2 24 47.7	8.23072	348	15 56.2
26.0	15 40 15.35		2 4 3 3.5	2 4 29.1	8.22714	358	15 48.3
26.5	16 8 57.57	28 42.22	25 45 44.5	1 42 41.0	8.22356	358	15 40.5
27.0	16 37 54.14	28 56.57	27 5 34 5	1 19 50.0	8.22004	352	15 33.0
27.5	17 6 56.73	29 2.59	28 1 57.5	0 56 23.0	8.21663	341	15 25.7
, ,	, , ,	28 58.85	3, 3	-o 32 48.8		-324	
28.0	17 35 55.58	28 44.73	-283446.3	-0 9 34.8	8.21339	302	15 18.8
28.5	18 4 40.31	28 20.55	28 44 21.1	+0 12 53.4	8.21037	277	15 12.4
29.0	18 33 0.86	27 47.57	28 31 27.7	0 34 14.7	8.20760	249	15 6.6
29.5	19 0 48.43	27 7.64	27 57 13.0	0 54 12.8	8.20511	218	15 1.4
30.0	19 27 56.07	26 23.02	27 3 0.2	1 12 37.6	8.20293	187	14 56.9
30.5	19 54 19.09	25 36.04	25 50 22.6	1 29 22.5	8.20106	156	14 53.1
31.0	20 19 55.13	24 48.89	24 21 0.1	1 44 26,5	8.19950	123	14 49.9
31.5	20 44 44.02		22 36 33.6		18 TO827	92	14 47.3
April 1.0	21 8 47.48	24 3.46	20 38 42.7	1 57 50.9	8.19735	62	14 45.5
1.5	21 32 8.76	23 21.28	18 29 3.5	2 9 39.2	8.19673	02	14 44.2
-		22 43.52	, ,	+2 19 56.3	1	- 33	,
2.0	21 54 52.28	22 11.07	-16 9 7.2	2 28 46.5	8.19640	- 5	14 43.5
2.5	22 17 3.35	21 44.52	13 40 20.7	2 36 13.7	8.19635	+ 20	14 43.4
3.0	22 38 47.87	21 24.35	11 4 7.0	2 42 21.2	LX TODES	1	14 43.8
3.5	23 0 12.22	21 10.81	8 21 45.8	2 47 10.6	1 X. TODOO	65	14 44.7
4.0	23 21 23.03	21 4.09	5 34 35.2	2 4/ 10.0	8.19764	84	14 46.1
4.5	23 42 27.12	' '	- 2 43 52.7		8.19848	102	14 47.8
5.0	0 3 31.50		+093.1	2 52 55.8	18.T0050		14 49.9
5.5	0 24 43.28	21 11.78	3 2 51.0	2 53 47.9	8.20067	117	14 52.3
6.0	0 46 9.66	21 26.38	5 56 5.9	2 53 14.9	8 20107	130	14 54.9
6.5	1 7 57.91	21 48.25	8 47 17.2	2 51 11.3	8.20339	142	14 57.9

Im Meridian von Berlin.

Datum		Mittlere	Im Meriu	Halbe	Bew. in		Bew. in
Kulminat:	ion	Zeit	AR.	DurchgD. Sternzeit	1 ^h Länge	Dekl.	I ^h Länge
März 18	0	8 ^h 57.0	8 40 3.60	-74·45	157.37	+22°57 29.0	— 696.g
	U	21 26.0	9 11 8.80	-73·47	153.59	+20 26 14.2	- 813.7
19	0	9 54.3	9 41 27.36	-72.46	149.65	+17 33 15.2	- 913.9
	U	22 21.8	10 10 59.59	-71.49	145.91	+14 22 2.4	- 995.6
20	o	10 48.5	10 39 49.44	-70.62	142.61	+10 56 23.6	-1058.0
	U	23 14.7	11 8 3.49	-69.91	139.94	+ 7 20 14.5	-1100.5
21	o	11 40.5	11 35 50.03	-69.41	138.02	+ 3 37 34.9	-1123.0
-	-	-	-		_		-
22		0 5.9	12 3 18.44	-69.11	136.90	— o 7 38.o	—112 6.0
	0	12 31.2	12 30 38.35	+69.04	136.58	- 3 51 31.4	-1109.8
23	U	0 56.5	12 57 59.25	+69.17	137.06	- 7 30 21.7	-1075.5
	0	13 22.0	13 25 29.91	+69.49	138.22	—II 0 35.8	-1023.9
24		1 47.9	13 53 17.98	+69.96	139.96	-14 18 54.2	— 956.3
	0	14 13.9	14 21 29.40	+70.55	142.11	-17 22 12.2	- 874.0
25	U	2 40.5	14 50 7.95	+71.18	144.46	-20 7 43.6	-778.7
	0	15 7.6	15 19 14.73	+71.81	146.77	$-22\ 33\ 1.7$	- 672.1
26		3 35.1	15 48 47.84	+72.36	148.79	$-24\ 36\ 4.3$	- 556.4
	0	16 2.9	16 18 42.22	+72.76	150.25	-26 15 16.3	— 434.I
,	$\frac{U}{\alpha}$	4 31.0	16 48 49.81	+72.96	150.91	-27 29 34.I	307.7
	0	16 59.1	17 19 0.19	+72.91	150.63	28 18 26.6	- 180.4
28	U	5 27.1	17 49 1.51	+72.61	149.35	-28 41 58.1	— 54.7
	0	17 54.7	18 18 41.74	+72.05	147.09	-28 40 44.8	+ 66.6
29	U	6 21.8	18 47 49.77	+71.26	143.97	-28 15 52.5	+ 181.4
	0	18 48.2	19 16 16.49	+70.29	140.21	-27 28 50.2	+ 288.1
30	$U \mid$	7 13.8	19 43 55.44	+69.18	136.02	-26 2I 20.8	+ 385.8
	$o \mid$	19 38.6	20 10 42.90	+68.00	131.65	-245517.1	+ 473.8
31		8 2.4	20 36 37.96	+66.80	127.32	-23 12 34.9	+ 552.1
	0	20 25.5	21 1 42.02	+65.65	123.19	$-21 ext{ } 15 ext{ } 7.9$	+ 621.2
April 1		8 47.7	21 25 58.49	+64.56	119.41	-19 4 45.2	+ 681.5
	0	21 9.2	21 49 32.10	+63.59	116.09	— 16 43 9.5	+ 733.4
2		9 30.1	22 12 28.77	+62.76	113.29	-14 II 57.9	+ 777.5
	o	21 50.6	22 34 55.07	+62.09	111.07	-11 32 41.2	+ 814.2
3	1	10 10.6	22 56 58.12	+61.59	109.45	- 8 46 46.6	+ 843.9
	o	22 30.4	23 18 45.33	+61.27	108.46	— 5 55 37.º	+ 866.6
4		10 50.0	23 40 24.32	+61.13	108.12	- 3 · 35.7	+ 882.5
	$\frac{O}{H}$	23 9.6	0 2 2.87	+61.19	108.43	- o 3 5.7	+ 891.4
5		11 29.4	o 23 48.91	+61.46	109.40	+ 2 55 27.2	+ 892.9
6	$\frac{O}{U}$	23 49.4	0 45 50.49	+61.93	111.07	+ 5 53 32.9	+ 886.7
0		12 9.7	1 8 15.79	-62.59	113.27	+ 8 49 35.0	+ 872.2
				-			

Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
April 6.0 6.5 7.0	0 46 9.66 1 7 57.91 1 30 15.19	21 48.25 22 17.28 22 53.34	+ 5°56′ 5.9 8 47 17.2 11 34 47.5	1-2 51 11.3 2 47 30.3 2 42 4.4	8.20197 8.20339 8.20492	+142 153 162	14 54.9 14 57.9 15 1.0
7.5 8.0 8.5 9.0	1 53 8.53 2 16 44.64 2 41 9.53 3 6 28.11	23 36.11 24 24.89 25 18.58	14 16 51.9 16 51 36.7 19 16 58.9 21 30 47.3	2 34 44.8 2 25 22.2 2 13 48.4	8.20654 8.20825 8.21003 8.21188	171 178 185	15 4.4 15 8.0 15 11.7 15 15.6
9.5 10.0 10.5	3 32 43.74 3 59 57.68 4 28 8.45	26 15.63 27 13.94 28 10.77	23 30 43.8 25 14 26.0 26 39 31.9	1 59 56.5 1 43 42.2 1 25 5.9	8.21381 8.21580 8.21785	193 199 205	15 19.7 15 23.9 15 28.3
11.0 11.5 12.0	4 57 11.41 5 26 58.61 5 57 19.03	29 2.96 29 47.20 30 20.42 30 40.30	+27 43 46.0 28 25 7.6 28 41 58.2	0 41 21.6 -10 16 50.6 -0 8 47.5	8.21996 8.22212 8.22433	+211 216 221 224	15 32.8 15 37.4 15 42.2
12.5 13.0 13.5 14.0	6 27 59.33 6 58 45.10 7 29 22.16 7 59 38.11	30 45.77 30 37.06 30 15.95	28 33 10.7 27 58 13.5 26 57 14.2 25 30 59.5	0 34 57.2 I 0 59.3 I 26 14.7	8.22657 8.22882 8.23106 8.23327	225 224 221	15 47.1 15 52.0 15 56.9 16 1.8
14.5 15.0 15.5	8 29 23.27 8 58 31.40 9 26 59.79	29 45.16 29 8.13 28 28.39 27 49.13	23 40 50.9 21 28 38.9 18 56 37.6	1 50 8.6 2 12 12.0 2 32 1.3 -2 49 19.3	8.23539 8.23741 8.23928	212 202 187 166	16 6.5 16 11.0 16 15.2
16.0 16.5 17.0	9 54 48.92 10 22 2. 07 10 48 44.66	27 13.15 26 42.59 26 18.97	+16 7 18.3 13 3 24.4 9 47 48.2	3 3 53.9 3 15 36.2 3 24 19.6	8.24094 8.24235 8.24346	141 111	16 18.9 16 22.1 16 24.6
17.5 18.0 18.5 19.0	11 15 3.63 11 41 6.94 12 7 3.12 12 33 0.80	26 3.31 25 56.18 25 57.68	6 23 28.6 + 2 53 29.4 - 0 39 2.2 4 10 56.3	3 29 59.2 3 32 31.6 3 31 54.1	8.24423 8.24461 8.24458 8.24411	+ 38 - 3 47	16 26.4 16 27.3 16 27.2 16 26.1
19.5 20.0 20.5	12 59 8.35 13 25 33.53 13 52 23.04	26 7.55 26 25.18 26 49.51	7 39 2.7 11 0 11.4 14 11 16.1	3 28 6.4 3 21 8.7 3 11 4.7	8.24321 8.24187 8.24012	90 134 175	16 24.1 16 21.1 16 17.1
21.0 21.5 22.0	14 19 42.00 14 47 33.52 15 15 58.19	27 18.96 27 51.52 28 24.67	-17 9 16.5 19 51 23.6 22 15 3.1	2 42 7.1 2 23 39.5	8.23799 8.23552 8.23278	247 274	16 12.3 16 6.8 16 0.7
22.5 23.0 23.5 24.0 24.5	15 44 53.67 16 14 14.53 16 43 52.39 17 13 36.55 17 43 14.72	28 55.48 29 20.86 29 37.86 29 44.16 29 38.17 29 19.66	24 18 0.3 25 58 27.3 27 15 6.3 28 7 14.3 28 34 44.3	2 2 57.2 1 40 27.0 1 16 39.0 0 52 8.0 0 27 30.0 -0 3 20.1	8.22982 8.22670 8.22350 8.22028 8.21711	312 320 322 317 307	15 54.2 15 47.4 15 40.4 15 33.5 15 26.7
25.0 25.5	18 12 34.38 18 41 23.88	28 49.50	28 38 4.4 28 18 13.8	+0 19 50.6	8.21404	291	15 20.2 15 14.0

Im I	I er	idi	an	von	Ber	lin.
------	-------------	-----	----	-----	-----	------

Datum und Kulmination	Mittlere Zeit	AR.	Ilaibe Durchg, -D. Sternzeit	Bew. in I ^h Länge	Dekl.	Bew. in 1 ^h Länge
April 6 U	12 9.7	ı 8 15.79	-62.59	113.27	+ 8°49 35.0	+ 872.2
		-			- 17 33	-
7 0	0 30.7	1 31 12.90	-63.44	116.24	+11 41 49.3	+ 848.6
U	12 52.3	1 54 49.81	-64.47	119.86	+14 28 22.2	+ 815.1
8 0	I 14.6	2 19 14.13	-65.66	124.11	+17 7 9.2	+ 770.7
U	13 37.9	2 41 32.77	-66.98	128.89	+19 35 54.4	+ 714.6
9 0	2 2.2	3 10 51.40	68.40	134.07	+21 52 11.2	+ 645.7
U	14 27.5	3 38 13.75	-69.84	139.47	+23 53 22.8	+ 563.6
10 0	2 53.9	4 6 41.01	-71.26	144.85	+25 36 47.1	+ 467.7
U	307	4 36 10.94	-72.56	149.88	+26 59 41.6	+ 358.6
11 0	3 49.8	5 6 37.41	-73.69	154.23	+27 59 32.4	+ 237.3
U		5 37 50.10	-74.54	157.57	+28 34 4.9	+ 105.8
12 0	4 48.6	6 9 35.17	-75.07	159.64	+28 41 34.4	— 32.7
U	17 18.6	6 41 36.25	-75.23	160.28	+28 20 57.0	- 174.6
13 0	5 48.5	7 13 36.29	-75.06	159.52	$+27\ 31\ 55.3$	- 316.0
U	18 18.2	7 45 19.37	-74.57	157.54	+26 15 0.6	- 452.8
14 0	6 47.4	8 16 32.41	-73.83	154.60	+24 31 30.3	- 581.4
U	19 15.9	8 47 6.27	-72.95	151.09	+22 23 19.1	— 699.т
15 0	7 43.6	9 16 56.16	-71.97	147.36	+19 52 52.3	- 803.7
U	20 10.7	9 46 1.48	—71.02	143.71	+17 2 56.8	- 893.7
16 O	8 37.1	10 14 25.11	-70.15	140.43	+13 56 33.2	— 968.I
U		10 42 12.76	-69.42	137.72	+10 36 52.0	1026.4
17 0	9 28.1	11 9 32.08	-68.86	135.70	+779.7	-1068.1
U	21 53.0	11 36 32.09	-68.52	134.47	+ 3 30 47.3	-1093.0
18 0	10 17.8	12 3 22.45	-68.38	134.07	- 0 8 51.0	-1100.7
U	22 42.7	12 30 13.14	-68.47	134.50	— 3 48 18.3	-1091.0
19 0	11 7.6	12 57 13.83	-68.78	135.70	— 7 24 6.5	1064.0
U	23 32.9	13 24 33.52	-69.28	137.61	-105247.4	- тог9.8
20 0	11 58.6	13 52 20.00	+69.92	140.24	-14 10 55.4	- 958.6
_	-	-	_	-	-	_
21 U		14 20 39.31	+70.68	143.18	—17 15 10.4	- 881.0
0	, ,	14 49 35.10	+71.48	146.29	-20 2 22.9	-788.2
22 U	/ / /	15 19 7.93	+72.27	149.30	—22 29 39.0	- 681.8
0	3 17 .	15 49 14.84	+72.95	151.89	-24 34 27.4	563.9
23 L		16 19 49.12	+73.44	153.77	-26 14 46.7	- 437.4
G	1 11 /	16 50 40.43	+73.70	154.66	-27 29 12.7	- 305.6
2.4 L		17 21 35.76	+73.67	154.36	-28 17 2.8	172.0
C	5 . 5	17 52 20.51	+73.34	152.83	-28 38 18.7	- 40.4
25 L		18 22 40.21	+72.71	150.14	-28 33 44.1	+ 85.8
O	16 38.2	18 52 21.92	+71.81	146.49	-28 4 38.3	+ 204.3

Dat	tum	W	ahr	e AR.	Diff.	Wah	re l	ekl.	1	Diff.	Log. sin. A. H. Par.	Diff.	На	lbm.
Apri	laro	-Q1	172	34.38	m .	20"	38			, ,	8.21404			20"
Арп	_			23.88	28 49.50			4.4 13.8	+0	19 50.6	8.21113	- 291	-	20.2
	25.5 26.0	19		_	28 9.56		-	_	0	41 37.9	8.20842	271		14.0
	26.5	19	-	33·44 55.91	27 22.47	27 26	_	35.9	I	1 43.4	8.20596	246	15	8.3
	27.0	20	3	26.98	26 31.07			52.5 55.2	I	19 57.3	8.20378	218	15	58.7
	27.5		29	5.12	25 38.14			38.4		3 6 16. 8	8.20190	188		54.8
	28.0	20	-	51.28	24 46.16	21		55.2	1	50 43.2	8.20033	157		51.6
	28.5			48.43	23 57.15			33.3	2	3 21.9	8.19911	122		49.1
	29.0	21	4T	1.06	23 12.63			13.0		14 20.3	8.19822	89		47.2
	29.5	22	•	_	22 33.75	15		27.3	2	23 45.7	8.19768	54	0.00	46.1
	-2.7	~~	3	34.01	22 1.27	1		2/.3	-1-2	31 46.0	0.19700	— 2I		40.1
	30.0	22	25	36.08		12	34	41.3			8.19747		14	45.7
	30.5	•	-	11.79	21 35.71		- :	14.4)	38 26.9	8.19757	+ 10		45.9
Mai	1.0	23		29.14	21 17.35	1 -	_	21.5		43 52.9	8.19799	42		46.8
	1.5	23		35.54	21 6.40	4		15.2		48 6.3	8.19869	70		48.2
	2.0	23	-	38.58	21 3.04	- I	33	7.2		51 8.0	8.19966	97		50.2
	2.5	0	II	45.90	21 7.32	+ I	-	48.8		52 56.0	8.20087	121		52.7
	3.0	0	33	5.24	21 19.34	4	-	14.7		53 25.9	8.20228	141		55.6
	3.5	0		44.35	21 39.11	7		46.9		52 32.2	8.20387	159		58.g
	4.0		-	51.01	22 6.66	9	-	53.9		50 7.0	8.20561	174	15	2.5
	4.5			32.79	22 41.78	12		54.2	2	46 0.3	8.20746	185	15	6.3
			57	3 17	23 24.21			٠.	+2	40 1.3	, ,	1-193		
	5.0	2	2	57.00	24 13.30	+15	21	55.5	2	31 58.0	8.20939	199	15	10.4
	5.5	2,	27	10.30	25 8.10	17	53	53.5		21 38.8	8.21138	202	15	14.5
	6.0			18.40	26 6.98	20	15	32.3		8 53.9	8.21340	202	15	18.8
	6.5	3	18	25.38	27 7.85	22	24	26.2		53 36.1	8.21542	200	15	23.1
	7.0	3	45	33.23	28 7.80	24	τ8	2.3		35 43.9	8.21742	196	15	27.3
	7.5	4	13	41.03	29 3.51	25	53	46.2		15 22.5	8.21938	191	15	31.5
	8.0	4	42	44.54	29 51.24	27	9	8.7		52 46.3	8.22129	184	15	35.6
	8.5	5	12	35.78	30 27.49	28	I	55.0		28 20.1	8.22313	176	15	39.6
	9.0	5	43	3.27	30 49.51	28	30	15.1		2 37.4	8.22489	170		43.4
	9.5	6	13	52.78	20 49.2×	28	32	52.5			8.22659	1/0	15	47.1
				0	30 55.77	. 0			-0	23 41.4		+161		
	10.0			48.55	30 46.36	1-28		II.I	0.	49 53.0	8.22820	153	15	50.6
	10.5	7	_	34.91	30 22.96		-	18.1		15 14.8	8.22973	143	15	54.0
	11.0			57.87	29 48.55	26	4	3.3		39 9.7	8.23116	134	-	57.2
	11.5		_	46.42	29 6.79			53.6		1 9.0	8.23250	125	16	0.1
	12.0			53.21	28 21 52		_	44.6		20 51.5	8.23375	113	16	2.9
	12.5	9	_	14.73	27 36.33	20	2,	53.1	2		8.23488	102	16	5.4
	13.0	9	40	51.06	26 54.28	17	2.1	49.2		52 39.7	8.23590	89	16	7.7
	13.5	10	7	45.34	26 17.63	14	32	9.5		4 36.0	8.23679	74	16	9.6
	14.0		34	2.97	25 48.11			33.5	_	13 52.1	8.23753	57	16	11.3
	14.5	TO	59	51.08	J 4	8	13	41.4	,	5 51	8.23810	3/	16	12.6

Im Meridian von Berlin.

Datum und Kulmination		Mittlere Zeit	AR.	Halbe DurchgD. Sternzeit	Bew. in I ^h Länge	Đekl.	Bew. in I ^h Länge
April	25 U	4 10.6	18 22 40.21	+72.71	150.14	-28°33′44″I	+ 85.8
Į	0	16 38.2	18 52 21.92	+71.81	146.49	-28 4 38.3	+ 204.3
	26 U	5 5.0	19 21 15.42	+70.72	142.12	-27 12 47.8	+ 313.0
	0	17 31.0	19 49 13.88	+69.50	137.35	−26 ∘ 16.2	+ 410.9
	27 U	5 56.0	20 16 14.00	+68.21	132.44	-24 29 14.7	+ 497.9
	0	18 19.9	20 42 15.69	+66.93	127.64	-22 41 54.0	+ 574.2
	28 U	6 43.0	21 7 21.48	+65.69	123.15	-20 40 19.1	+ 640.3
	0	19 5.2	21 31 35.91	+64.57	119.13	$-18\ 26\ 26.7$	+ 697.3
	29 U	7 26.7	21 55 5.09	+63.57	115.64	—16 2 2.9	745.6
	0	19 47.5	22 17 55.98	+62.73	112.79	—13 28 44.4	+ 786.5
	30 U	8 7.8	22 40 16.28	+62.07	110.58	—10 47 59.6	+ 820.2
3.5 .	0	20 27.7	23 2 14.04	+61.59	109.06	- 8 I 10.2	+847.2
Mai	I U	8 47.4	23 23 57.48	+61.31	108.24	-5933.7	+ 868.0
	o	21 7.0	23 45 35.05	+61.24	108.13	— 2 I4 26.5	+882.3
	2 U	9 26.7	0 7 15.28	+61.37	108.73	+ 0 42 54.1	+ 890.1
	0	21 46.5	0 29 6.78	+61.72	110.05	+ 3 41 6.9	+ 891.0
	3 U		0 51 18.25	+62.27	112.09	+ 6 38 44.7	+ 884.1
	0	22 27.3	1 13 58.42	+63.03	114.86	+ 9 34 11.8	+ 868.9
	4 U	_	1 37 15.92	+63.98	118.35	+12 25 40.4	+ 844.2
	0	23 10.6	2 1 19.16	+65.11	122.51	+15 11 10.8	+ 808.9
	5 U	11 33.5	2 26 15.87	+-66.40	127.30	+17 48 28.3	+ 761.7
	0	23 57.4	2 52 12.90	-67.8 t	132.32	+20 15 3.3	+ 701.6
	6 U	12 22.4	3 19 15.15	69.27	137.90	$+22\ 28\ 13.3$	+627.3
	-	-	-	_	-		
	7 0	0 48.5	3 47 25.17	-70.75	143.56	+24 25 5.2	+ 538.4
	U	3	4 16 42.04	72.15	148.99	+-26 2 42.5	+ 434.8
	8 0		4 47 0.68	-73.37	153.81	+27 18 13.3	+ 317.4
	U		5 18 11.46	-74.34	157.66	+28 9 2.9	+ 188.3
	9 0		5 50 0.45	-74.99	160.18	+28 33 8.0	+ 50.6
	U	15 13.0	6 22 10.43	75.2 6	161.18	+28 29 6.9	- 91.9
	10 0	3 43.2	6 54 22.64	-75.15	160.61	+27 56 30.0	— 234. 7
	U	16 13.1	7 26 19.02	-74.68	158.62	+26 55 40.9	- 373.2
	11 0	4 42.5	7 57 44.11	-73.94	155.51	+25 27 54.4	- 503.6
	t	17 11.1	8 28 26.63	-72.99	151.62	+23 35 7.0	- 623.0
	12 ()	3 37	8 58 19.94	-71.94	147.38	+21 19 44.3	- 729.I
	ι		9 27 22.08	-70.86	143.15	+18 44 32.2	- 821.0
	13 0		9 55 35.14	-69.86	139.24	+15 52 25.5	— 898. ₁
	ι	31	10 23 4.33	-68.97		+12 46 22.8	- 960.3
	14 0		10 49 57.20		33	+ 9 29 21.9	-1007.8
	T.	19 46.8	11 16 22.87	-67.74	131.31	+ 6 4 18.6	-1040.6

Mittlerer Mittag und Mitternacht.

Da	tum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Mai	14.0	10 34 2.97	m s	+11 27 33.5	0 , "	8.23753		16 11.3
Mai	14.5	10 59 51.08	25 48.11	8 13 41.4	-3 13 52.1	8.23810	- I - 57	16 11.3
	15.0	27 3	25 26.85		3 20 27.8	8.23847	3 7	16 13.4
	15.5	11 25 17.93 11 50 32.48	25 14.55	4 53 13.6 1 28 49.8	3 24 23.8	8.23864	+ 17	16 13.8
	16.0	12 15 43.91	25 11.43	- I 56 49.2	3 25 39.0	8.23856	- 8	16 13.6
	16.5	, ,,,,	25 17.48	1 2	3 24 11.2	8.23823	33	16 12.0
	17.0	12 41 1.39	25 32.35		3 19 58.3	8.23763	60	16 11.5
	,	13 6 33.74 13 32 29.06	25 55.32	8 40 58.7	3 12 57.9	8.23674	89	
	17.5 18.0		26 25.29	11 53 56.6	3 3 8.4	8 225 5	117	1
		13 58 54.35	27 0.63	14 57 5.0	2 50 30.6	8.23557	145	-
	18.5	14 25 54.98	27 39.27	17 47 35.6	-2 35 8.1	8.23412	-173	16 3.7
	19.0	14 53 34.25	28 18.44	-2 0 22 43.7		8.23239		15 59.9
	19.5	15 21 52.69		22 39 53.9	2 17 10.2	8.23042	197	15 55.5
	20.0	15 50 47.76	28 55.07	24 36 46.3	1 56 52.4	8.22822	220	15 50.7
	20.5	16 20 13.49	29 25.73	26 11 22.9	1 34 36.6	8.22583	239	15 45.5
	21.0	16 50 0.58	29 47.09	27 22 15.5	1 10 52.6	8.22330	253	15 40.0
	21.5	17 19 57.08	29 56.50	28 8 31.6	0 46 16.1	8.22068	262	15 34.3
	22.0	17 49 49.39	29 52.31	28 29 57.1	-0 21 25.5	8.21800	268	15 28.6
	22.5	18 19 23.50	29 34.11	28 26 57.1	+0 3 0.0	8.21532	268	15 22.9
	23.0	18 48 26.42	29 2.92	28 0 32.5	0 26 24.6	8.21270	262	15 17.2
	23.5	19 16 47.36	28 20.94	27 12 12.5	0 43 20.0	8.21017	253	15 12.0
	55	, ,,	27 31.17	,5	+1 8 25.7	,	-238	
	24.0	19 44 18.53	26 36.76	-26 3 46.8	1 26 29.8	8.20779	218	15 7.0
	24.5	20 10 55.29	25 40.81	24 37 17.0	1 42 28.9	8.20561	196	15 2.5
	25.0	20 36 36.10	24 46.06	22 54 48.1	1 56 25.3	8.20365	170	14 58.4
	25.5	21 1 22.16	23 54.71	20 58 22.8	2 8 26.4	8.20195		14 54.9
	26.0	21 25 16.87	23 8.35	18 49 56.4		8.20054	141	14 52.0
	26.5	21 48 25.22	22 28.20	16 31 16.1	2 18 40.3	8.19944		14 49.7
	27.0	22 10 53.42		14 3 59.0	2 27 17.1	8.19867	77	14 48.2
	27.5	22 32 48.40	21 54.98	11 29 32.6	2 34 26.4	8.19825	— 4 ² — 8	14 47.3
	28.0	22 54 17.59	21 29.19	8 49 16.5	2 40 16.1	8.19817		14 47.1
	28.5	23 15 28.80	21 11.21	6 4 24.3	2 44 52.2	8.19843	+ 26	14 47.7
			21 1.16		1-2 48 19.1		+ 60	
	29.0	23 36 29.96	20 59.23	- 3 I6 5.2	2 50 38.0	8.19903	93	14 48.9
	29.5	23 57 29.19	21 5.49	- 0 25 27.2	2 51 47.6	8.19996	124	14 50.8
	30.0	0 18 34.68	21 20.10	1- 2 26 20.4	2 51 44.7	8.20120	151	14 53.3
	30.5	0 39 54.78	21 43.05	5 18 5.т	2 50 22.6	8.20271	178	14 56.5
	31.0	и и 37.83	22 14.44	8 8 27.7	-	8.20449		15 0.1
	31.5	I 23 52.27		10 56 0.4	2 47 32.7	8.20648	199	15 4.3
Juni	1.0	I 46 46.32	22 54.05	13 39 3.5	2 43 3.1	8.20867	219	15 8.9
	1.5	2 10 27.89	23 41.57	16 15 44.3	2 36 40.8	8.21100	233	15 13.8
	2.0	2 35 4.24	24 36.35	18 43 55.6	2 28 11.3	8.21343	243	15 18.9
	2.5	3 0 41.38	25 37.14	21 1 15.0	2 17 19.4	8.21592	249	15 24.1
		, ,		- 1		37-		

Im Meridian von Berlin.

	atum und nination	Mittlere Zeit	AR.	Halbe Durchg D. Sternzeit	Bew. in	Dekl.	Bew. in
Mai	14 <i>O</i>	7 22.4 19 46.8	10 49 57.20 11 16 22.87	-68 .2 4 -67.74	133.18	+ 9°29°21.9 + 6°4°18.6	—1007.8 —1040.6
	15 0	8 10.9	11 42 31.34	-67.44	130.30	+2347.9	-1059.0
	15 U	20 34.9	12 8 33.12	-67.44 -67.38	130.16	-0.58 16.0	-1059.0 -1062.7
	16 0	8 58.9		-67.55	130.89	- 4 29 57.0	—I051.7
	U	1 -	12 34 38.74				
		21 23.2	13 0 58.42	-67.94	132.46	- 7 57 56.5	-1025.6
	$\begin{array}{ccc} 17 & O \\ & U \end{array}$	9 47.9	13 27 41.68	-68.53	134.79	—II 19 12.0	- 984.2
	18 0	22 13.1	13 54 56.92	-69.28	137.75	—14 30 38.2	- 927.2
	10 U	10 39.0	14 22 50.76	-70.15	141.16	-17 29 7.7	- 854.7
	U	23 5.6	14 51 27.40	-71.07	144.83	-20 11 35.9	— 767.0
	19 0	11 32.8	15 20 47.97	-71.97	148.43	-22 35 4.8	— 66 5 .0
	_					_	1 100
	20 U	0 0.8	15 50 49.79	+72.78	151.78	-24 36 53.9	- 550.6
	0	12 29.4	16 21 26.09	+73.40	154.24	-26 14 45.2	-425.8
	21 U	0 58.3	16 52 25.97	+73.76	155.61	-27 26 56.1	- 294.4
	0	13 27.4	17 23 35.27	+73.81	155.71	-28 12 27.3	- 159.8
	22 U	1 56.4	17 54 37.90	+73.52	154.43	-28 31 6.1	- 26.4
	0	14 25.0	18 25 17.48	+72.92	151.89	-28 23 28.4	+ 102.3
	23 U	2 53.0	18 55 19.40	+72.02	148.13	-27 50 51.8	+ 222.9
	0	15 20.2	19 24 31.75	+70.92	143.61	-26 55 6.9	+ 333.3
		- 5	-7 -4 3-75	1 7 - 1 - 1		559	' 333'3
	24 U	3 46.4	19 52 46.64	+69.65	138.59	-25 38 26.0	+ 432.1
	0	16 11.6	20 20 0.0I	+68.33	133.40	24 3 11.2	+ 518.8
	25 U	4 35.7	20 46 11.54	+66.99	128.31	-22 11 45.5	+ 593.9
	O	16 58.9	21 11 23.76	+65.73	123.55	-20 6 24.8	+ 658.1
	26 U	5 21.2	21 35 41.55	+64.56	119.28	-174914.9	712.5
	0	17 42.6	21 59 11.40	+63.54	115.61	-15 22 9.7	+ 757.5
	27 U	6 3.4	22 22 0.87	+62.68	112.59	-124650.2	+ 794.7
	0	18 23.7	22 44 18.14	+62.01	110.28	-10 4 47.0	+ 824.9
	28 U	6 43.6	23 6 11.80	+61.55	108.70	- 7 17 21.5	+ 848.5
	0	19 3.2	23 27 50.74	+61.28	107.87	- 4 25 49.2	+ 866.0
	29 U	7 22.7	23 49 23.94	+61.23	107.78	— I 3I 22.2	+ 877.6
	0	19 42.3	0 11 0.47	+61.40	108.47	+ 1 24 47.5	+ 883.1
	30 U	8 2.1	0 32 49.67	+61.79	109.93	+ 4 21 25.1	+ 882.2
	0	20 22.2	0 55 0.81	+62.41	112.18	+ 7 17 9.8	874.I
	31 U	8 42.9	1 17 43.42	+63.23	115.21	+10 10 31.3	+ 858.0
	0	21 4.3	1 41 6.89	+64.27	119.03	+12 59 46.9	+ 832.7
Juni	I U	9 26.5	2 5 20.43	+65.49	123.57	+15 42 58.1	+ 797.1
	0	21 49.7	2 30 32.60	+66.88	128.81	+18 17 50.0	+ 749.3
	2 U	10 13.9	2 56 50.91	+68.38	134.60	+20 41 48.0	+687.8
	0	22 39.4	3 24 20.77	+69.96	140.73	+22 52 0.1	+ 611.4
	O	77 39.4	7 -7 20.//	1 59.95	775/75	1 - 3 - 0.1	322.4

Dat	um	Wahre A	R.	Diff.	Wahre D	ekl.	Di	r.	Log. sin. A. H. Par.	Diff.	Hal	.bm.
Juni		2 35 4	9	100	00	"			0		,	-0"-
Jum	2.0	2 35 4	1.24	25 37·14	+18°43		+2 17	19.4	8.21343	+249		18.9
	2.5	3 0 41	- 1	26 42.11		15.0	2 3	52.0	8.21592	251	_	24.1
	3.0	3 27 23		27 48.65	23 5	7.0		39.8	8.21843	247		29.5
	3.5	3 55 12	2.14	28 53.31	24 52	-		39.5	8.22090	239		34.8
	4.0	4 24 5	5.45	29 52.07	26 21			58.5	8.22329	228		40.0
	4.5		7.52	30 40.56	27 28	24.8		54.6	8.22557	212	15	44.9
	5.0	5 24 38	3.08	31 14.91	28 11	19.4	+0 16		8.22769	195	15	49.5
	5.5	5 55 52	2.99	31 32.18	28 28		-0 10		8.22964	175	15	53.8
	6.0	6 27 25	5.17		28 18	13.2		٠.	8.23139		15	57.7
	6.5	6 58 56	5.44	31 31.27	27 40	14.2	0 3/	29.0	8.23291	152	16	1.0
			, ,	31 12.97			- 1	20.3		+129		
	7.0	7 30 9	9.41	30 39.93	+26 36	23.9	T 10	50.2	8.23420	105	16	3.9
	7-5	8 0 49	9.34	29 56.04	25 6	33.7			8.23525	83	16	6.2
	8.0	8 30 45			23 13			19.5	8.23608	60 60	16	8.1
	8.5	8 59 51		29 5.67	20 58	55.2		19.0	8.23668		16	9.4
	9.0		4. 2 8	28 13.23	18 26			31.3	8.23707	39	16	10.3
	9.5	9 55 26	•	27 22.45	15 38			48.4	8.23725	+ 18	16	10.7
	10.0		2.99	26 36.26	12 38		_	10.0	8.23725	0	16	10.7
	10.5	10 47 59		25 56.88	9 28			39.6	8.23707	- 1 8	16	10.3
	11.0		5.59	25 25.72	6 12		3 16	23.9	8.23674	33	16	9.5
	11.5	11 38 29		25 3.70	+ 2 51		3 20	29.4	8.23625	49	16	8.4
	11.5	11 30 29	9.49	24 51.23	T 2 51	54.0	-3 22	1.5	0.23025	- 64	10	0.4
	12.0	12 3 20	0.52	24 48.41	- o 30	8.9			8.23561	76	16	7.0
	12.5	12 28 8	8.93		3 51	13.1	3 21		8.23485		16	5.3
	13.0		3.99	24 55.06		53.5		40.4	8.23395	90	16	3.3
	13.5	13 18 14		25 10.68	10 20			50.9	8.23292	103	16	1.0
	14.0	13 43 49		25 34-45	13 24			34.3	8.23176	116	15	58.5
	14.5	14 9 54		26 5.22	16 17	8.9	_	50.2	8.23046	130		55.6
	15.0	14 36 3	-	26 41.37	18 56	-	2 30	38.3	8.22902	144	_	52.4
	15.5		6.42	27 20.71	21 20		2 2		8.22746	156	_	49.0
	16.0	15 31 5		28 0.59		53.6	2 (-	8.22577	169		45.3
	16.5	16 0 3	-	28 37.83	25 12		1 4	5 1.5	8.22396	181	_	
	10.5	10 0 3	4.04	29 9.12	45 14	22.1	—I 2	4 9.5	0.22390	-191	1.0	41.4
	17.0	16 29 4	2.06		—26 37	4.6			8.22205		15	37-3
	17.5	16 59 1	-	29 31.18	5,	59.2		54.6	8.22004	201	_	33.0
	18.0	17 28 5		29 41.35	28 14			6 49.6	8.21796	208		28.5
	18.5			29 37.94				2 30.6	- '-	214	1	
	,	17 58 3		29 20.61	,	19.4	+0 I	1 24.3	8.21582	215	_	23.9
	19.0	18 27 5	-	28 50.34		55.1	0 3	4 20.9	8.21367	214	_	19.4
	19.5	18 56 4		28 9.30		34.2	0 5	5 49.6	8.21153	210	15	
	20.0	19 24 5		27 20.39		44.6	_	5 29.0	8.20943	202	15	_
	20.5	19 52 1		26 26.75	25 30	15.6	13		8.20741	192	15	
	21.0	20 18 4	1.82	25 31.53	23 57	9.4	_	8 36.3	8.20549	176	15	
	21.5	20 44 I	2.35	-5 555	22 8	33.1	- 4	30.3	8.20373	1/5	14	58.6

Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg, -D, Sternzeit	Bew. in I ^h Länge	Dekl.	Bew. in I ^h Länge
Juni 2 U	10 13.9 22 39.4	2 56 50.91 3 24 20.77	+68.38 +69.96	134.60	+20°41′48.0 +22°52°0.1	+ 687.8 + 611.4
3 <i>U</i>	11 6.1	3 53 4.85	+71.51	146.91	+24 45 20.5	+ 518.9
0	23 34.0	4 23 1.70	+72.98	152.78	+26 18 36.0	+ 410.4
4 <i>U</i>	12 3.0	4 54 5.02	-74·24	157.69	+27 28 38.7	+ 286.9
-	12 5.0	4 54 5.02	/4.44	157.09		1 200.9
5 0	0 32.9	5 26 3.12	-75.2 I	161.63	+28 12 40.8	+ 150.8
U	13 3.4	5 58 39.28	-75.21 -75.80	164.02	+28 28 31.5	+ 5.7
6 0	I 34.3	6 31 33.28	-75.96	164.64	+28 14 52.2	- 143.3
U		, , ,		163.48	+27 31 27.7	- 291.0
	14 5.1	7 4 23.57	-75.69	103.40	T2/ 31 2/./	291.0
7 0	2 35.4	7 36 49.90	-75.06	160.75	+26 19 6.2	- 431.9
U	15 5.2	8 8 35.75	-74.12	156.85	+24 39 34.2	- 562.0
8 0	3 34.0	8 39 29.68	-73.00	152.21	$+22\ 35\ 22.8$	- 678.0
U	16 1.9	9 9 25.75	-71.80	147.30	+20 9 33.9	- 778.0
9 0	4 28.8	9 38 23.22	-70.60	142.51	+17 25 22.7	— 861.5
U	16 54.8	10 6 25.56	69.50	138.14	+14 26 9.1	- 9 2 8.4
10 0	5 20.0	10 33 39.33	-68.54	134.42	+11 15 8.3	- 979.4
U	17 44.5	11 0 13.26	-67.78	131.49	+ 7 55 27.9	-1015.I
11 0	6 8.5	11 26 17.44	-67.24	129.44	+ 4 30 5.4	-1036.5
U	18 32.3	11 52 2.66	-66.93	128.29	+ I I 50.5	-1043.9
	10 54.5), 4.00	00.93	120129	1 2 2 3003	104319
12 0	6 55.9	12 17 39.92	-66.87	128.07	— 2 2 6 33.2	-1037.9
U	19 19.5	12 43 20.15	-67.04	128.75	-55226.3	-1018.7
13 0	7 43.3	13 9 13.83	-67.42	130.28	- 9 13 10.5	- 986.4
U	20 7.6	13 35 30.76	-68.02	132.58	-12 26 6.7	- 940.6
14 0	8 32.4	14 2 19.45	68.77	135.53	—15 28 33.3	- 881.3
U	20 57.8	14 29 46.78	-69.64	138.97	-18 17 46.1	- 808.3
15 O	9 23.9	14 57 57.32	-70.56	142.68	-20 51 2.1	- 721·S
U	21 50.8	15 26 52.56	-71.48	146.37	-23 5 41.3	- 622.2
16 <i>0</i>	10 18.4	15 56 30.30	-72.29	149.73	-24 59 14.6	510.9
U	22 46.6	16 26 44.35	-72.92	152.39	-26 29 32.4	- 390.0
	•	55	. ,	J 37	, , , ,	37
17 0	11 15.2	16 57 24.44	-73.31	154.05	-27 34 53.8	- 262.0
U	23 44.0	17 28 16.89	-73.41	154.46	-28 14 15.9	- 130.6
18 O	12 12.8	17 59 5.84	+73.16	153.44	-28 27 19.9	+ 0.4
-	-	_	_	-		-
19 U	0 41.2	18 29 34.99	+72.59	151.10	-28 14 33.7	+ 127.1
0	13 9.1	18 59 29.34	+71.74	147.63	-27 37 7.3	+ 246.4
20 U	1 36.1	19 28 36.69	-+-70.66	143.27	-26 36 45.6	+ 355.9
o	14 2.3	19 56 48.45	+69.43	138.38	-25 15 37.9	+ 453.8
21 <i>U</i>	2 27.4	20 23 59.94	+68.12	133.28	-23 36 6.6	+ 539.7
0	14 51.4	20 50 10.24	+66.80	128.22	-21 40 37.0	+ 613.7
					1	

Mittlerer Mittag und Mitternacht.

Dat	um	Wali	re AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Juni	21.0	20 1	8"41.82	m s	-23 57 9.4	0 1 "	8.20549		15 2.2
	21.5		1 13.35	25 31.53	22 8 33.1	+1 48 36.3	8.20373	-176	14 58.6
	22.0		8 50.74	24 37.39	20 6 32.1	2 2 I.O	8.20214	159	14 55.3
	22.5		2 37.26	23 46.52	17 53 6.0	2 13 26.1	8.20077	137	14 52.5
	23.0		5 37.84	23 0.58	15 30 5.8	2 23 0.2	8.19964	113	14 50.1
	23.5		7 58.58	22 20.74	12 59 12.7	2 30 53.1	8.19878	86	14 48.4
	24.0		9 46.38	21 47.80	10 21 57.5	2 37 15.2	8.19821	57	14 47.2
	24.5	_	8.68	21 22.30	7 39 42.9	2 42 14.6	8.19795	— <u>2</u> 6	14 46.7
	25.0		2 13.24	21 4.56	4 53 44.1	2 45 58.8	8.19802	+ 7	14 46.8
	25.5	23 4	0 0	20 54.84	- 2 5 10.9	2 48 33.2	8.19843	41	14 47.7
))	'	,	20 53.27	- J J	+2 49 59.8		+ 75	, ,
	26.0	0	4 1.35	21 0.08	+ 0 44 48.9		8.19918	109	14 49.2
	26.5	0 2	5 1.43		3 35 8.3	2 50 19.4	8.20027	,	14 51.4
	27.0	0 4	6 16.78	21 15.35	6 24 37.6	2 49 29.3	8.20168	141	14 54.3
	27.5	1	7 56.02	21 39.24	9 12 2.1	2 47 24.5	8.20341	173	14 57.9
	28.0	13	0 7.83	22 11.81	11 55 58.2	2 43 56.1	8.20544	203	15 2.1
	28.5		3 0.81	22 52.98	14 34 52.1	2 38 53.9	8.20775	231	15 6.9
	29.0	2 I	-	23 42.53	17 6 56.3	2 32 4.2	8.21027	252	15 12.2
	29.5		1 23.09	24 39-75	19 30 7.6	2 23 11.3	8.21299	272	15 17.9
	30.0		7 6.65	25 43.56	21 42 6.8	2 11 59.2	8.21588	289	15 24.1
	30.5	3 3	, ,	26 52.05	23 40 19.3	1 58 12.5	8.21887	299	15 30.4
	5 5		J	28 2.54	.51 /5	+1 41 38.8	· '	-H302	
Juli	1.0	4	2 1.24	29 11.40	+25 21 58.1	I 22 12.4	8.22189	400	15 36.9
	1.5	4 3	1 12.64	30 14.28	26 44 10.5		8.22489	300	15 43.4
	2.0	5	1 26.92		27 44 8.0	0 59 57-5	8.22783	294	15 49.8
	2.5	5 3	2 33.42	31 6.50	28 19 19.1	0 35 11.1 -10 8 24.5	8.23062	279 260	15 56.0
	3.0	-	4 17.13	31 43.71	28 27 43.6		8.23322		16 1.7
	3.5		6 19.89	32 2.76	28 8 6.9	-0 19 36.7	8.23557	235	16 6.9
	4.0	7	8 22.17	32 2.28	27 20 8.4	0 47 58.5	8.23761	204	16 11.5
	4.5	1	0 5.40	31 43.23	26 4 25.7	1 15 42.7	8.23932	171	16 15.3
	5.0	8 1	1 13.87	31 8.47	24 22 31.7	1 41 54.0	8.24068	136	16 18.4
	5.5		1 36.08	30 22.21	22 16 44.9	2 5 46.8	8.24166	98	16 20.6
	, ,		,	29 29.29	'''	-2 26 47.9		+ 58	
	6.0	9 1	I 5.37	08 01 01	+19 49 57.0	0 44 06 8	8.24224	+ 20	16 21.9
	6.5	9 3	9 39.71	28 34-34	17 5 20.2	2 44 36.8	8.24244	1	16 22.3
	7.0	10	7 21.03	27 41.32	14 6 16.0	2 59 4.2	8.24228	- 16	16 22.0
	7.5	10 2	4 14.32	26 53.29	10 56 4.5	3 10 11.5	8.24179	49	16 20.9
	8.0	11	0 26.72	26 12.40	7 38 0.1	3 18 4.4	8.24098	81	16 19.0
	8.5	11 2		25 40.15	4 15 7.4	3 22 52.7	8.23991	107	16 16.6
	9.0		1 24.12	25 17.25	+ 0 50 19.7	3 24 47.7	8.23862	129	16 13.7
	9.5	-	6 28.17	25 4.05	- 2 33 40.5	3 24 0.2	8.23713	149	16 10.4
	10.0		1 28.66	25 0.49	5 54 19.8	3 20 39.3	8.22548	165	16 6.7
	10.5	13	6 34.91	25 0.25	9 9 12.5	3 14 52.7	8.23371	177	16 2.8
	20.5	1~3	- 34.91		1 9 9 14.5		77.233/1		1

Im Meridian von Berlin.

	itum ind inatio	on	Mittlere Zeit	AR.	Halbe Durchg, -D. Sternzeit	Bew. in 1 ^h Länge	Dekl.	Bew. in 1 ^h Länge
Juni		- 1	2 27.4	20 23 59.94	+68.12	133.28	$-23^{\circ}36^{\circ}6.6$	+ 539.7
		o	14 51.4	20 50 10.24	+66.80	128.22	-21 40 37.0	+613.7
	22	U	3 14.7	21 15 21.38	+65.55	123.46	-193129.5	+ 676.1
		0	15 37.0	21 39 37.88	+64.39	119.16	17 10 56.1	+728.1
	23	U	3 58.4	22 3 5.87	+63.37	115.42	—14 40 55.9	+ 770.7
		0	16 19.2	22 25 52.73	+62.51	112.34	-12 3 16.1	+ 804.8
	24	U	4 39.4	22 48 6.53	+61.85	109.95	— 9 19 31.8	+ 831.4
		0	16 59.2	23 9 55.81	+61.38	108.29	- 6 3I 8.2	+ 851.4
	25	U	5 18.7	23 31 29.39	+61.13	107.37	- 3 39 22.8	+ 865.3
		0	17 38.1	23 52 56.30	+61.09	107.23	— o 45 27.8	+ 873.r
	26	U	5 57.6	0 14 25.79	+61.27	107.85	+ 2 9 26.0	+ 875.0
		0	18 17.2	0 36 7.21	+61.67	109.26	+ 5 4 7.4	+ 870.9
	27		6 37.3	0 58 10.13	+62.31	111.48	+ 7 57 20.4	+ 860.2
	_	0	18 57.8	1 20 44.34	+63.15	114.51	+10 47 41.1	+ 842.0
	28	U	7 19.0	1 43 59.58	+64.21	118.36	+13 33 34.3	+ 815.3
		0	19 41.1	2 8 5.61	+65.46	123.01	+16 13 10.2	+778.8
	29	U	8 4.2	2 33 11.65	+66.90	128.39	+18 44 20.5	+ 730.8
		0	20 28.4	2 59 26.00	+68.46	134.39	+21 4 37.8	+ 669.6
	30	U	8 53.8	3 26 55.08	+70.11	140.83	+23 11 13.8	+ 593.5
		0	21 20.6	3 55 42.58		147.41	+25 I 2.3	+ 501.3
Juli	1		9 48.6	4 25 48.09	+73.32	153.74	+26 30 45.3	+ 392.5
		0	22 17.9	4 57 6.04	+74.68	159.36	+27 37 5.0	+ 267.6
	2		10 48.1	5 29 25.13	+75.74	163.79	+28 16 59.0	+ 128.6
		O	23 19.1	6 2 28.35	+76.41	166.58	+28 27 59.9	— 2 0.7
	3	U	11 50.5	6 35 54.48	+76.62	167.48	+28 8 33.8	- 174.9
	-	-	-	-	-	-	7	
	4	0	0 21.9	7 9 20.36	-76.39	166.54	-+27 18 14.7	— 328. ₄
		U	12 52.9	7 42 23.97	-75.76	163.89	+25 57 48.8	— 475.0
	5		I 23.2	8 14 46.98	-74.80	159.90	+24 9 10.0	— 609.8
		U	13 52.6	8 46 16.48	-73.64	155.08	+21 55 5.5	728.8
	6		2 21.1	9 16 45.58	-72.38	149.94	+19 18 59.6	- 829.6
		U	14 48.5	9 46 13.09	-71.13	144.88	+16 24 36.2	- 911.5
	7	O	3 14.9	10 14 42.29	-69.98	140.25	+13 15 43.8	- 974.4
		U	15 40.5	10 42 19.87	-68.97	136.28	+ 9 56 6.1	-1019.2
	8	0	4 5.4	11 9 14.82	68.18	133.13	+ 6 29 14.9	-1046.8
		U	16 29.7	11 35 37.45	-67.60	130.87	+ 25828.8	-1058.5
	9	0	4 53.7	12 1 38.74	-67.27	129.54	$- \circ 33 \ 8.3$	-1055.3
		U	17 17.5	12 27 29.79	-67.19	129.13	— 4 2 43.6	-1038.3
	10	0	5 41.4	12 53 21.51	-67.32	129.61	-72735.5	1008.1
		U	18 5.4	13 19 24.27	-67.68	130.93	—10 45 8.6	— 965.2

Da	tum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Juli	10.0	12 41 28.66	m 4		0 / 11	8 225 48		16 6.7
oun			25 6.25	- 5 54 19.8	-3 14 52.7	8.23548	-177	16 2.8
	10.5	13 6 34.91	25 20.68	9 9 12.5	3 6 45.8	8.23371	185	
	11.0	13 31 55.59	25 42.85	12 15 58.3	2 56 22.6	8.23186	192	15 58.7
	11.5	13 57 38.44	26 11.38	15 12 20.9	2 43 46.3	8.22994	196	15 54.5
	12.0	14 23 49.82	26 44.57	17 56 7.2	2 29 0.2	8.22798	198	15 50.2
	12.5	14 50 34.39	27 20.21	20 25 7.4	2 12 9.6	8.22600	199	15 45.8
	13.0	15 17 54.60	27 55.64	22 37 17.0	1 53 22.3	8.22401	198	15 41.5
	13.5	15 45 50.24	28 27.82	24 30 39.3	1 32 50.7	8.22203	198	15 37.2
	14.0	16 14 18.06	28 53.76	26 3 30.0	1 10 53.6	8.22005	197	15 33.0
	14.5	16 43 11.82		27 14 23.6		8.21808		15 28.8
			29 10.55	0 0	-0 47 54 4		-195	
	15.0	17 12 22.37	29 15.99	-28 2 18.0	0 24 22.3	8.21613	192	15 24.6
	15.5	17 41 38.36	29 8.87	28 26 40.3	-0 0 49.4	8.21421	189	15 20.5
	16.0	18 10 47.23	28 49.12	28 27 29.7	+0 22 11.1	8.21232	184	15 16.5
	16.5	18 39 36.35	28 17.89	28 5 18.6	0 44 9-4	8.21048	180	15 12.6
	17.0	19 7 54.24	27 37.27	27 21 9.2	I 4 40.3	8.20868	174	15 8.9
	17.5	19 35 31.51	26 49.96	26 16 28.9	I 23 24.7	8.20694	167	15 5.2
	18.0	20 2 21.47	25 58.78	24 53 4.2	1 40 12.0	8.20527	157	15 1.8
	18.5	20 28 20.25	25 6.54	23 12 52.2	1 54 56.4	8.20370	145	14 58.5
	19.0	20 53 26.79	24 15.60	21 17 55.8		8.20225	132	14 55.5
	19.5	21 17 42.39	24 15.00	19 10 16.7	2 7 39.1	8.20093	134	14 52.8
			23 27.93		+2 18 24.6		-117	
	20.0	21 41 10.32	22 44.99	—16 51 52.I	2 27 20.2	8.19976	100	14 50.4
	20.5	22 3 55.31	22 7.85	14 24 31.9	2 34 33.9	8.19876	78	14 48.3
	21.0	22 26 3.16	21 37.24	11 49 58.0	2 40 14.7	8.19798	56	14 46.8
	21.5	22 47 40.40	21 13.67	9 9 43.3	2 44 30.3	8.19742	32	14 45.7
	22.0	23 8 54.07	20 57.45	6 25 13.0		8.19710	- 6	14 45.0
	22.5	23 29 51.52	20 48.91	3 37 45.3	2 47 27.7	8.19704		14 44.8
	23.0	23 50 40.43		- 0 48 33.6	2 49 11.7	8.19727	+ 23	14 45.3
	23.5	0 11 28.58	20 48.15	+ 2 1 12.1	2 49 45.7	8.19780	53	14 46.4
	24.0	0 32 23.95	20 55.37	4 50 22.6	2 49 10.5	8.19865	85	14 48.1
	24.5	0 53 34.71	21 10.76	7 37 47.3	2 47 24.7	8.19981	116	14 50.5
		33 3.7	21 34.45	1 37 17 3	+2 44 24.6		+148	. , ,
	25.0	1 15 9.16	22 6.51	+10 22 11.9	2 40 3.8	8.20129	181	14 53.6
	25.5	1 37 15.67		13 2 15.7		8.20310		14 57.3
	26.0	2 0 2.60	22 46.93	15 36 28.3	2 34 12.6	8.20521	211	15 1.6
	26.5	2 23 38.03	23 35-43	18 3 8.1	2 26 39.8	8.20762	241	15 6.6
	27.0	2 48 9.54	24 31,51	20 20 19.8	2 17 11.7	8.21030	268	15 12.2
	27.5	3 13 43.59	25 34.05	22 25 53.2	2 5 33.4	8.21322	292	15 18.4
	28.0	3 40 24.95	26 41.36	24 17 23.2	1 51 30.0	8.21635	313	15 25.1
	28.5	4 8 15.91	27 50.96	25 52 12.9	I 34 49.7	8.21963	328	15 32.1
	29.0	4 37 15.34	28 59.43	27 7 38.7	1 15 25.8	8.22301	338	15 39.4
	29.5	0.0	30 2.74		0 53 19.0	8.22644	343	15 46.8
	49.3	5 7 18.08		28 0 57.7		0.44044		15 40.0

Im Meridian von Berlin.

	atum	Mittlere	1.0	Halbe	Bew. in	T) 11	Bew. in
	und nination	Zeit	AR.	DurchgD. Sternzeit	I ^{li} Länge	Dekl.	I ^h Länge
T 11		h m	h nı s		6	0 1 11	li .
Juli	10 0	5 41.4	12 53 21.51	-67.32	129.61	-72735.5	-1008.1
	U	18 5.4	13 19 24.27	67.68	130.93	—10 45 8.6	- 965.2
	11 0	6 29.7	13 45 47.50	-68.22	132.98	-135252.4	- 909.9
	U	18 54.5	14 12 39.35	-68.92	135.64	—16 48 19. 2	- 842.4
	12 ()	7 20.0	14 40 6.11	-69.71	138.76	-19 29 3.5	— 76 2.7
	<i>U</i>	19 46.0	15 8 11.85	-70.55	142.10	-215242.6	- 671.5
	13 0	8 12.7	15 36 57.60	-71.36	145.39	23 57 o.5	- 569.3
	<i>U</i>	20 40.0	16 6 20.89	-72.07	148.32	$-25\ 39\ 52.0$	— 457·3
	14 0	9 7.8	16 36 15.55	-72.59	150.59	-26 59 30.6	337.5
	U	21 36.1	17 6 31.80	—7 2. 88	151.90	-27 54 36.3	— 212.1
	15 0	10 4.5	17 36 56.86	-72.89	152.07	-28 24 21.4	- 84.5
	U	22 32.8	18 7 16.20	-72.58	150.99	$-28\ 28\ 38.2$	+ 42.0
	16 <i>O</i>	11 0.7	18 37 15.02	-71.98	148.71	-28 7 59.1	+ 164.2
	U	23 28.1	19 6 39.79	-71.13	145.39	-27 23 33.5	+ 279.3
	17 O	11 54.7	19 35 19.49	-70.06	141.28	-26 17 1.6	+ 384.9
	-	-	-	-	-		-
	18 U	0 20.4	20 3 6.46	+68.86	136.47	-24 50 26.7	+ 479.6
	0	12 45.2	20 29 56.44	+67.60	131.63	-23 6 3.8	+ 562.8
	19 U	1 9.1	20 55 48.59	+66.34	126.85	-21 6 12.2	+634.3
	0	13 32.0	21 20 44.82	+65.12	122.35	—18 53 9.4	+ 694.7
	20 U	I 54.0	21 44 49.21	+64.01	118.26	—16 29 5.1	+ 744.6
	o	14 15.3	22 8 7.47	+63.04	114.70	—13 55 59.6	+ 785.0
	21 $\it U$	2 35.9	22 30 46.43	+62.23	111.75	-11 15 42.0	+ 816.7
	0	14 56.0	22 52 53.65	+61.60	109.45	— 8 29 51.I	+ 840.7
	22 U	3 15.7	23 14 37.14	+61.15	107.84	-53956.3	+ 857.5
	0	15 35.2	23 36 5.27	+60.92	106.93	- 2 47 19.5	+ 867.7
	23 U	3 54.5	23 57 26.61	+60.89	106.74	+ 0 6 43.2	+ 871.8
	0	16 13.8	0 18 49.93	+61.08	107.30	+ 3 0 58.4	+ 869.8
	24 U	4 33.4	0 40 24.20	+61.48	108.61	+ 5 54 13.0	+861.7
	0	16 53.3	1 2 18.63	+62.10	110.70	+ 8 45 11.6	+ 846.9
	25 U	5 13.6	1 24 42.58	+62.93	113.57	+11 32 32.7	+ 825.2
	0	17 34.7	1 47 45.51	+63.97	117.23	+14 14 46.0	+ 795.5
	26 U	5 56.5	2 11 36.85	+65.20	121.68	+16 50 8.8	+ 756.5
	0	18 19.3	2 36 25.72	+66.61	126.85	+19 16 43.1	+ 707.1
	27 U	6 43.2	3 2 20.42	+68.16	132.65	+21 32 13.1	+ 645.5
	0	19 8.2	3 29 27.67	+69.79	138.93	+23 34 3.7	+ 570.2
	28 U	7 34.5	3 57 51.79	+71.44	145.43	+25 19 22.4	+ 479.9
1	0	20 2.2	4 27 33.56	+73.02	151.80	+26 45 3.4	+ 373.7
	29 U	8 31.1	4 58 29.02	+74.43	157.59	+27 47 55.7	+ 251.7
	0	21 1.0	5 30 28.78	+75.57	162.34	+28 24 57.9	+ 115.6
		1	,	1 . 5 5 7	1		

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Juli 29.0	4 37 15.34	m s	+27 7 38.7	0 / 4	8.22301		15 39.4
29.5	5 7 18.08	30 2.74	28 0 57.7	+0 53 19.0	8.22644	+343	15 46.8
30.0	5 38 14.47	30 56.39	28 29 41.0	0 28 43.3	8.22984	340	15 54.2
30.5	6 9 50.65	31 36.18	28 31 46.4	+0 2 5.4	8.23314	330	16 1.5
31.0	6 41 49.56	31 58.91	28 5 51.6	-0 25 54.8	8.23627	313	16 8.5
31.5	7 13 52.65	32 3.09	27 11 26.0	0 54 25.6	8.23915	288	16 14.9
Aug. 1.0	7 45 41.85	31 49.20	25 48 55.4	1 22 30.6	8.24172	257	16 20.7
1.5	8 17 1.63	31 19.78	23 59 42.3	1 49 13.1	8.24391	219	16 25.7
2.0	8 47 40.37	30 38.74	21 45 57.9	2 13 44.4	8.24566	175	16 29.7
2.5	9 17 31.00	29 50.63	19 10 33.9	2 35 24.0	8.24693	127	16 32.5
3) -1 5	28 59.96	7 - 337	-2 53 45.2	1 73	+ 78	ي ي
3.0	9 46 30.96	28 10.64	+16 16 48.7	2 8 22 6	8.24771	1. 05	16 34.3
3.5	10 14 41.60	27 25.84	13 8 16.1	3 8 32.6	8.24796	+ 25 - 25	16 34.9
4.0	10 42 7.44	26 47.76	9 48 35.8	3 19 40.3	8.24771		16 34.3
4.5	11 8 55.20		6 21 24.6	3 27 11.2	8.24698	73 118	16 32.7
5.0	11 35 13.04	26 17.84	+ 2 50 11.8	3 31 12.8	8.24580		16 30.0
5.5	12 1 9.99	25 56.95	- 0 41 44.1	3 31 55.9	8.24422	158	16 26.4
6.0	12 26 55.31	25 45.32	4 11 17.7	3 29 33.6	8.24230	192	16 22.0
6.5	12 52 38.19	25 42.88	7 35 35.6	3 24 17.9	8.24008		16 17.0
7.0	13 18 27.31	25 49.12	10 51 56.7	3 16 21.1	8.23765	243	16 11.6
7.5	13 44 30.59	26 3.28	13 57 50.8	3 5 54.1	8.23506	259	16 5.8
	3 3 32	26 24.13	0 0 0	-2 53 7.1		-270	-
8.0	14 10 54.72	26 50.12	—16 50 57.9	2 38 9.1	8.23236	275	15 59.8
8.5	14 37 44.84	27 19.30	19 29 7.0	2 21 9.9	8.22961	277	15 53.7
9.0	15 5 4.14	27 49.30	21 50 16.9	2 2 20.9	8.22684	272	15 47.7
9.5	15 32 53.44	28 17.41	23 52 37.8	1 41 55.4	8.22412	265	15 41.8
10.0	16 1 10.85	28 40.88	25 34 33.2	1 20 10.8	8.22147	256	15 36.0
10.5	16 29 51.73	28 57.01	26 54 44.0	0 57 28.6	8.21891	246	15 30.5
0.11	16 58 48.74	29 3.61	27 52 12.6	0 34 13.6	8.21645	234	15 25.3
11.5	17 27 52.35	28 59.23	28 26 26.2	-0 10 53.5	8.21411	221	15 20.3
12.0	17 56 51.58	28 43.47	28 37 19.7	-I-O 12 3.4	8.21190	207	15 15.6
12.5	18 25 35.05		28 25 16.3		8.20983	,	15 11.3
		28 16.91		10 34 9.6		-194	
13.0	18 53 51.96	27 41.11	-27516.7	0 55 1.6	8.20789	180	15 7.2
13.5	19 21 33.07	26 58.22	26 56 5.1	1 14 20.6	8.20609	165	15 3.5
14.0	19 48 31.29	26 10.77	25 41 44.5	1 31 53.7	8.20444	151	15 0.0
14.5	20 14 42.06	25 21.29	24 9 50.8	1 47 33.4	8.20293	138	14 56.9
15.0	20 40 3.35	24 32.06	22 22 17.4	2 1 17.2	8.20155	124	14 54.1
15.5	21 4 35.41	23 45.01	20 21 0.2	2 13 7.0	8.20031	109	14 51.5
16.0	21 28 20.42	23 1.74	18 7 53.2	2 23 6.6	8.19922	94	14 49.3
16.5	21 51 22.16	22 23.32	15 44 46.6	2 31 21.6	8.19828	78	14 47.4
17.0	22 13 45.48	21 50.59	13 13 25.0	2 37 58.5	8.19750	62	14 45.8
17.5	22 35 36.07	, ,,	10 35 26.5	3, 3. 3	8.19688		14 44.5

Im	Meri	dian	von	Berlin.
----	------	------	-----	---------

Im Meridian von Berlin.											
Datum und Kulmination	Mittlere Zeit	AR.	Haibe DurchgD. Sternzeit	Bew. in I ^h Länge	Dekl.	Bew. in 1 ^h Lange					
Juli 29 U	8 ^h 31.1	4 ^h 58 ^m 29.02	+74.43	157.59	+27°47′55″7	+ 251.7					
0	21 1.0	5 30 28.78	±75.57	162.34	+28 24 57.9	+ 115.6					
30 U	9 31.8	6 3 17.95	-+76.35	165.70	+28 33 36.0	- 31.7					
0	22 3.1	6 36 37.19	+76.70	167.26	+28 12 0.5	- 185.8					
31 <i>U</i>	10 34.5	7 10 4.63	+76.62	166.98	+27 19 23.3	- 341.0					
0	23 5.7	7 43 18.60	+76.13	164.99	+25 56 6.6	- 491.4					
Aug. 1 U	11 36.3	8 16 0.36	+75.31	161.61	+24 3 42.2	- 631.3					
2 0	0 6.2	8 47 55.94	+74.26	157.51	+21 44 43.2	- 756.3					
U	12 35.1	9 18 57.08	-73.09	152.81	+19 2 29.1	-863.3					
	35	9 3/	73.09	- 5-1	, - , - , - , - , - , - , - , - , - , -						
3 0	I 3.2	9 49 1.18	-71.92	148.08	+16 0 48.7	- 950.4					
U	13 30.3	10 18 10.27	−70.82	143.68	+12 43 46.3	-1016.9					
4 0	1 56.6	10 46 30.08	-69.87	139.89	+91528.4	-1063.0					
U	14 22.2	11 14 8.81	69.11	136.82	+ 5 39 55.2	-1089.5					
5 O	2 47.2	11 41 16.21	-68.57	134.63	+ 2 0 55.0	-1097.6					
U	15 11.9	12 8 2.77	-68.25	133.32	- I 37 58.0	-1088.5					
6 0	3 36.5	12 34 39.20	-68.18	132.90	- 5 I3 25.2	-1063.4					
U	16 1.1	13 1 15.89	-68.32	133.33	- 8 42 21.7	-1023.5					
7 0	4 25.8	13 28 2.52	-68.67	134.53	12 1 56.1	969.8					
U	16 50.9	13 55 7.79	69.18	136.39	15 9 27.6	- 903.I					
8 0	5 16.4	14 22 38.79	69.81	138.77	-18 2 25.8	- 824.2					
U	17 42.4	14 50 40.60	-70.52	141.47	-2 0 38 28.7	- 734.0					
9 0	6 8.9	15 19 15.75	-71.24	144.29	-22 55 25.7	- 633.3					
U	18 36.0	15 48 23.77	-71.90	146.92	-245118.4	- 523.5					
10 O	7 3.6	16 18 0.81	72.43	149.09	-26 24 25.8	- 406.0					
U	19 31.5	16 47 59.67	-72.77	150.54	27 33 28.7	— 283.I					
11 0	7 59.6	17 18 10.17	-72.86	151.03	-28 17 36.8	— 157.4					
U	20 27.7	17 48 19.98	-72.66	150.45	—28 36 31.9	- 31.4					
12 0	8 55.6	18 18 15.83	-72.19	148.75	-28 30 30.5	+ 91.7					
U	21 23.1	18 47 44.86	—71 . 46	146.04	−28 ○ 23. 1	+ 209.2					
13 0	9 49.9	19 16 35.84	-70.5I	142.48	—27 7 30.6	+ 318.8					
U	22 15.9	19 44 40.17	-69.40	138.32	-25 53 37.2	+ 418.9					
14 0	10 41.1	20 11 52.25	-68 .2 0	133.83	-24 20 43.4	508.7					
U	23 5.3	20 38 9.55	66.96	129.24	-22 30 58.2	+ 587.5					
15 0	11 28.6	21 3 32.31	-65.73	124.77	−2 ○ 26 32.6	+655.3					
U	23 51.1	21 28 3.15	-64.59	120.60	-18 9 35.4	+ 712.8					
16 O	12 12.8	21 51 46.39	+63.54	116.68	-15 42 9.0	+760.3					
_	-	-	-	-		-					
17 <i>U</i>	0 33.8	22 14 47.71	+62.64	113.46	—13 6 8.1	+ 798.6					
0	12 54.2	22 37 13.62	+61.89	110.81	—10 23 19.4	+ 828.4					

Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Aug. 17.0	22 13 45.48	m s	—13°13′25.°	0 / "	8.19750		14 45.8
17.5	22 35 36.07	21 50.59	10 35 26.5	H= 37 58.5	8.19688	— 6 ₂	14 44.5
18.0	22 57 0.23	21 24.16	7 52 22.4	2 43 4.1	8.19643	45	14 43.6
18.5	23 18 4.65	21 4.42	5 5 38.1	2 46 44.3	8.19618	25	14 43.1
19.0	23 38 56.23	20 51.58	- 2 16 34.0	2 49 4.1	8.19612	- 6	14 43.0
19.5	23 59 42.12	20 45.89	+ 0 33 32.7	2 50 6.7	8.19629	+ 17	14 43.3
20.0	0 20 29.58	20 47.46	3 23 27.8	2 49 55.1	8.19669	40	14 44.1
20.5	0 41 26.04	20 56.46	6 11 57.2	2 48 29.4	8.19734	65	14 45.4
21.0	1 2 39.01	21 12.97	8 57 46.0	2 45 48.8	8.19824	90	14 47.3
21.5	1 24 16.12	21 37.11	11 39 35.9	2 41 49.9	8.19941	117	14 49.7
3	' '	22 8.86	37 337	1-2 36 27.2	,,,	+146	107
22.0	1 46 24.98	22 48.10	+14 16 3.1	2 29 34.2	8.20087	174	14 52.7
22.5	2 9 13.08	23 34.54	16 45 37.3	2 29 34.2	8.20261	203	14 56.3
23.0	2 32 47.62	24 27.52	19 6 38.6	2 10 37.8	8.20464	231	15 0.5
23.5	2 57 15.14	25 25.93	21 17 16.4	1 58 12.7	8.20695	258	15 5.2
2.4.0	3 22 41.07	26 28.16	23 15 29.1		8.20953	284	15 10.6
2.4.5	3 49 9.23		24 59 4.5	1 43 35.4	8.21237		15 16.6
25.0	4 16 41.12	27 31 89	26 25 41.4	1 26 36.9	8.21544	307	15 23.1
25.5	4 45 15.25	28 34.13	27 32 54.7	1 7 13.3	8.21870	326	15 30.1
26.0	5 14 46.62	29 31.37	28 18 22.1	0 45 27.4	8.22212	342	15 37.4
26.5	5 45 6.53	30 19.91	28 39 53.3	-1-0 21 31.2	8.22565	353	15 45.1
3	, , , , , , , ,	30 56.29	32 33 3	-0 4 12.7		+357	3 13
27.0	6 16 2.82	31 18.01	+28 35 40.6	0 31 10.3	8.22922	355	15 52.9
27.5	6 47 20.83	31 23.88	28 4 30.3	0 58 40.1	8.23277		16 0.7
28.0	7 18 44.71	31 14.39	27 5 50.2		8.23622	345 328	16 8.4
28.5	7 49 59.10	30 51.66	25 39 55.9	1 25 54.3 1 52 4.6	8.23950	302	16 15.7
29.0	8 20 50.76	30 18.90	23 47 51.3	1 52 4.6 2 16 25.1	8.24252	268	16 22.5
29.5	8 51 9.66	,	21 31 26.2	2 38 17.7	8.24520	226	16 28.6
30.0	9 20 49.62	29 39.96 28 58.73	18 53 8.5		8.24746		16 33.8
30.5	9 49 48.35	28 18.70	15 55 57.5	2 57 11.0	8.24925	179	16 37.9
31.0	10 18 7.05		12 43 13.8	3 12 43.7	8.25051	68	16 40.8
31.5	10 45 49.73	27 42.68	9 18 33.2	3 24 40.6	8.25119	00	16 42.3
	., ., .,	27 12.80		-3 32 56.1		1 10	
Sept. 1.0	11 13 2.53	26 50.45	+ 5 45 37.1	3 37 28.8	8.25129	40	16 42.5
1.5	11 39 52.98	26 36.45	+ 2 8 8.3		8.25080	106	16 41.4
2.0	12 6 29.43		— I 30 I3.8	3 38 22.1	8.24974		16 39.0
2.5	12 33 0.49	26 31.06	5 5 58.0	3 35 44.2	8.24815	159	16 35.4
3.0	12 59 34.60	26 34.11	8 35 42.7	3 29 44.7	8.24611	204	16 30.7
3.5	13 26 19.55	26 44.95	11 56 19.0	3 20 36.3	8.24366	245	16 25.1
4.0	13 53 22.16	27 2.61	15 4 51.3	3 8 32.3	8.24088	278	16 18.8
4.5	14 20 47.70	27 25.54	17 58 38.6	2 53 47-3	8.23785	303	16 12.0
5.0	14 48 39.57	27 51.87	20 35 15.4	2 36 36.8	8.23462	323	16 4.8
5.5	15 16 58.85	28 19.28	22 52 34.4	2 17 19.0	8.23131	331	15 57.5
٠,٠	, ,,,,,,		1 2- 24.4		1 3 - 3 -		7 3113

Im	M	eri	dian	von	Berlin.

	atur und rina		Mittlere Zeit	AR.	Halbe DurchgD Sternzeit	Bew. in 1 ^h Länge	Dekl.	Bew. in 1 ^h Länge
Aug.	17		o 33.8	22 14 47.71	+62.64	113.46	-13° 6′ 8″.1	+ 798.6
	- 0	0	12 54.2	22 37 13.62	61.89	110.81	—10 23 19.4	+ 828.4
	10	U	I 14.2	22 59 11.27	+61.31	108.79	- 7 35 20.6	+ 850.2
	7.0	O_{IT}	13 33.7	23 20 48.19	+60.93	107.40	- 4 43 43·5	+ 864.8 872.5
	19	U	1 53.1	23 42 12.16	+60.75	106.67 106.62	— I 49 52.5	+ 873.6
	20	$\frac{O}{U}$	14 12.4		+60.75	100.02	+ I 4 50.9 + 3 59 8.4	+868.2
	20	0	2 31.8	0 24 53.43 0 46 27.13	+61.37	108.57	+ 3 59 8.4 + 6 51 41.7	+ 856.2
	2.1	U	14 51.3	. , ,	+62.00	110.60		-
	41	0	3 11.2	I 8 20.73 I 30 42.86	+62.81	113.35	+ 9 41 10.8 +12 26 10.8	+ 837.5 + 811.3
	22	U	3 52.5	1 53 42.04	+63.82	116.81	+15 5 10.5	+ 777.1
		O	16 14.2	2 17 26.80	+65.00	120.97	17 36 28.6	+ 734.1
	23	U	4 36.8	2 42 5.18	+66.34	125.77	+19 58 11.9	+ 681.1
		0	17 0.4	3 7 44.43	+67.80	131.13	+22 8 13.6	+ 617.0
	24	U	5 25.1	3 34 30.38	+69.34	136.88	+24 4 12.8	+ 540.5
		0	17 51.0	4 2 26.64	+70.88	142.81	+25 43 34.5	+ 450.4
	25	U	6 18.1	4 31 33.73	+72.36	148.62	+27 3 34.0	+ 346.5
		O	18 46.3	5 1 48.26	-1-73.69	153.95	+28 I 23.2	+ 228.8
	26	U	7 15.5	5 33 2.26	+74.78	158.42	+28 34 22.1	+ 98.4
		0	19 45.4	6 5 3.24	-⊢75.56	161.66	+28 40 12.0	— 42·3
	27	\bar{U}	8 15.9	6 37 34.96	+75.97	163.44	-+28 17 8.9	- 189.8
	,	0	20 46.6	7 10 18.99	+-75.99	163.64	+27 24 18.0	- 339.5
	28	U	9 17.2	7 42 56.75	+-75.66	162.36	+26 I 42.2	- 486.5
		0	21 47.4	8 15 11.87	+75.02	159.86	+24 10 23.7	-625.7
	29	U	10 17.0	8 46 51.68	+74.17	156.50	+21 52 22.0	— 753.0
		0	22 45.9	9 17 48.24	+73.20	152.70	+19 IO 22.2	- 864.8
	30	U	11 14.0	9 47 58.44	+72.22	148.86	+16 7 46.9	- 958.5
		0	23 41.4	10 17 23.56	+71.29	145.23	+12 48 23.2	-1032.5
	31	U	12 8.1	10 46 8.17	-70.50	142.26	+ 9 16 12.5	-1086.2
	-	-	-		-	****		-
Sept.	I	0	0 34.2	11 14 19.49	-69.88	139.82	+ 5 35 21.4	-1119.2
1		\overline{U}	12 59.9	11 42 6.32	69.46	138.17	+ 1 49 56.5	-1131.8
	2	0	I 25.4	12 9 38.34	-69.27	137.34	— I 56 2.2	-1124.8
		U	13 50.9	12 37 5.52	-69.29	137.32	- 5 <u>3</u> 8 43.8	-1099.1
	3	0	2 16.3	13 4 37.46	-69.53	138.09	- 9 14 29.6	-1055.6
	9	U	14 42.0	13 32 23.01	-69.94	139.55	-12 39 54.5	995.6
	4	0	3 8.1	14 0 29.74	-70.50	141.57	—15 51 47.6	- 920.5
	,	U	15 34.6	14 29 3.26	-71.15	143.97	-18 47 14.2	- 831.3
	5		4 1.6	14 58 6.87	71.83	146.54	-21 23 35.9	- 729.8
	,	U	16 29.2	15 27 40.94	-72.48	149.01	-23 38 35.0	- 617.8
				J/ 474	7 3.40	77.02	-5 50 55.0	-7.0

Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
01	14 48 39.57		0 , "		0 (-		-6" ."0
Sept. 5.0		28 19.28	-2 0 35 15.4	-2 17 19.0	8.23462	-33t	16 4.8
5.5	15 16 58.85	28 45.09	22 52 34.4	1 56 13.3	8.23131	335	15 57.5
6.0	15 45 43.94	29 6.49	24 48 47.7	1 33 42.5	8.22796	332	15 50.1
6.5	16 14 50.43	29 20.85	26 22 30.2	1 10 12.0	8.22464	325	15 42.9
7.0	16 44 11.28	29 25.92	27 32 42.2	0 46 9.5	8.22139	312	15 35.9
7.5	17 13 37.20	29 20.27	28 18 51.7		8.21827	297	15 29.2
8.0	17 42 57.47		28 40 56.4		8.21530	278	15 22.8
8.5	18 12 0.86	29 3.39	28 39 22.9	+0 1 33.5	8.21252		15 16.9
9.0	18 40 36.76	28 35.90	28 15 4.3	0 24 18.6	8.20995	257	15 11.5
9.5	19 8 35.98	27 59.22	27 29 16.5	0 45 47.8	8.20760	235	15 6.6
73	-7 . 33.9-	27 15.54	-, -,,	+1 5 43.3		-213	,
10.0	19 35 51.52		-26 23 33.2		8.20547		15 2.1
10.5	20 2 18.86	26 27.34	24 59 39.2	1 23 54.0	8.20356	191	14 58.2
11.0	20 27 55.94	25 37.08	23 19 25.4	1 40 13.8	8.20189	167	14 54.8
11.5	20 52 42.94	24 47.00	21 24 44.7	1 54 40.7	8.20043	146	14 51.8
12.0		23 59.05		2 7 16.6	8.19918	125	
	21 16 41.99	23 14.71	19 17 28.1	2 18 5.2		103	14 49.2
12.5	21 39 56.70	22 35.14	16 59 22.9	2 27 12.0	8.19815	85	14 47.1
13.0	22 2 31.84	22 1.11	14 32 10.9	2 34 42.2	8.19730	65	14 45.4
13.5	22 24 32.95	21 33.15	11 57 28.7	2 40 41.6	8.19665	45	14 44.0
14.0	22 46 6.10	21 11.63	9 16 47.1	2 45 14.3	8.19620	27	14 43.1
14.5	23 7 17.73		6 31 32.8		8.19593		14 42.5
		20 56.76		+2 48 24.7		- 11	
15.0	23 28 14.49	20 48.66	-3438.1	2 50 15.1	8.19582	+ 7	14 42.3
15.5	23 49 3.15	20 47.45	- 0 52 53.0	2 50 46.7	8.19589	2.4	14 42.5
16.0	0 9 50.60	20 53.18	+ 1 57 53.7	2 50 0.5	8.19613	43	14 43.0
16.5	0 30 43.78	21 5.89	4 47 54.2		8.19656	60	14 43.9
17.0	0 51 49.67		7 35 49.2	2 47 55.0	8.19716		14 45.1
17.5	1 13 15.22	21 25.55	10 20 16.5	2 44 27-3	8.19795	79	14 46.7
18.0	1 35 7.34	21 52.12	12 59 51.1	2 39 34.6	8.19895	100	14 48.7
18.5	1 57 32.78	22 25.44	15 33 2.3	2 33 11.2	8.20015	120	14 51.2
19.0	2 20 37.99	23 5.21	17 58 12.8	2 25 10.5	8.20155	140	14 54.1
19.5	2 44 28.82	23 50.83	20 13 38.9	2 15 26.1	8.20317	162	14 57.4
19.5	2 44 20.02	24 41.41	20 13 30.9	+2 3 50.3	0.2031/	-1-185	14 5/.4
20.0	3 9 10.23		+22 17 29.2		8.20502		15 1.2
20.5	3 34 45.87	25 35.64		1 50 15.7	8.20710	208	15 5.6
21.0		26 31.71	24 7 44.9	I 34 37.0	- '	230	
	1 ' ' '	27 27.27	25 42 21.9	1 16 52.0	8.20940	252	15 10.4
21.5	4 28 44.85	28 19.66	26 59 13.9	0 57 2.5	8.21192	273	15 15.7
22.0	4 57 4.51	29 5.88	27 56 16.4	0 35 16.9	8.21465	292	15 21.4
22.5	5 26 10.39	29 43.00	28 31 33.3	+0 11 50.4	8.21757	308	15 27.7
23.0	5 55 53.39	30 8.79	28 43 23.7	-0 12 53.5	8.22065	322	15 34.3
23.5	6 26 2.18	30 21.78	28 30 30.2	0 38 25.1	8.22387	331	15 41.2
	6 46 22 26	30/0	07 70 77	0 30 23.1	8.22718	33*	15 48.4
24.0	6 56 23.96	30 21.82	27 52 5.1	1 4 10.1	8.23053	335	15 55.8

Im Meridian von Berlin.

Datum und Kulminatio	on	Mittlere Zeit	AR.	Halbe DurchgD. Sternzeit	Bew. in I ^h Länge	Dekl.	Bew. in 1 ^h Länge
Sept. 5	0	h m 4 I.6	14 58 ° 6.87	_7i.83	146.54	21°23′35.9	-729.8
	U	16 29.2	15 27 40.94	-72.48	149.0I	-23 38 35.0	617.8
6 (o	4 57.2	15 57 42.49	—73.02	151.10	-25 30 16.2	-497.2
	U	17 25.5	16 28 5.18	-73.38	152.51	-26 57 11.9	-370.5
7	o	5 54.0	16 58 39.57	-73.51	153.04	-27 58 25.2	-240.7
-	U	18 22.5	17 29 13.85	-73.36	152.51	-28 33 34.4	110.5
8	o	6 50.8	17 59 35.05	-72.94	150.90	-28 42 54.I	+ 17.1
	U	19 18.7	18 29 30.29	-72.24	148.26	-28 27 12.3	+139.4
9	0	7 46.0	18 58 48.16	-71.31	144.74	-27 47 47.6	+253.9
	U	20 12.4	19 27 19.65	-70.21	140.58	—26 46 22. 7	+359.1
IO	o	8 38.0	19 54 58.67	68.99	136.05	-25 24 55.I	+454.2
	U	21 2.7	20 21 42.21	-67.72	131.38	-23 45 30.9	+538.5
11	$o \mid$	9 26.5	20 47 30.05	66.45	126.80	—21 50 18.7	+612.1
	U	21 49.4	21 12 24.31	-65.23	122.48	—19 4I 2 4.9	+675.4
12		10 11.4	21 36 29.02	-64.11	118.54	—17 2 0 49.8	+729.0
	U	22 32.7	21 59 49.50	-63.12	115.11	-14 50 27.4	+773.5
13	0	10 53.4	22 22 32.03	-62.28	112.21	-12 12 3.6	+809.3
	U	23 13.6	22 44 43.45	61.61	109.89	- 9 2 7 1 7.9	+837.2
14		11 33.3	23 6 30.97	-61.12	108.20	-63743.7	+857.4
	U	23 52.8	23 28 2.02	60.80	107.13	— 3 44 49.2	+870.5
15	0	12 12.2	23 49 24.26	+60.68	106.69	- 0 49 59.8	+876.6
-	-	_	-	-	-	_	-
16	U	0 31.5	0 10 45.27	+-60.76	106.94	+ 2 5 21.6	+875.8
	0	12 50.9	0 32 12.86	+61.02	107.82	+ 4 59 52.2	+868.1
17		1 10.6	0 53 54.77	+61.49	109.35	+7527.5	+853.2
	0	13 30.6	1 15 58.81	4-62.14	111.55	+10 40 40.0	+830.9
18		1 51.2	1 38 32.76	+62.97	114.37	+13 23 58.1	+800.6
	0	14 12.4	2 I 44.24	+63.97	117.83	+16 0 22.6	+761.9
19		2 34.3	2 25 40.52	+65.12	121.86	+18 28 6.8	+713.8
	0	14 57.0	2 50 28.19	+66.40	126.40	+20 45 14.8	+655.6
20	U	3 20.7	3 16 12.76	-+67.77	131.35	+22 49 40.8	+586.5
	()	15 45.5	3 42 58.21	+69.17	136.52	+24 39 9.4	十505.9
21		4 11.2	4 10 46.08	+70.55	141.71	+26 11 18.5	+413.2
	0	16 38.0	4 39 35.12	+71.84	146.65	+27 23 43.0	+308.4
22		5 5.7	5 9 20.56	+72.98	151.03	+28 14 1.2	+192.2
	0	17 34.2	5 39 54.02	+73.88	154.55	+28 40 3.4	+ 66.0
23		6 3.3	6 11 3.65	+74.48	156.97	+28 40 2.8	- 67.9
	0	18 32.8	6 42 35.24	+-74.76	158.13	+28 12 44.5	-206.5
24		7 2.4	7 14 13.48	+74.73	158.02	+27 17 33.3	-346.I
	0	19 31.8	7 45 43.65	+74.40	156.76	+25 54 39.5	-482.9

Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbin.
Sept. 24.0	6"56"23.96	m a	+27 52 5.1	0 / 1	8.22718		15 48.4
24.5	7 26 45.78	30 21.82	26 47 55.0	-1 4 10.1	8.23053	1-335	15 55.8
25.0	7 56 55.72	30 9.94	25 18 24.2	1 29 30.8	8.23387	334	16 3.1
25.5	8 26 44.06	29 48.34	23 24 32.5	1 53 51.7	8.23712	325	16 10.3
26.0	8 56 3.97	29 19.91	21 7 54.1	2 16 38.4	8.24020	308	16 17.3
26.5	9 24 51.84	28 47.87	18 30 33.1	2 37 21.0	8.24307	287	16 23.8
27.0	9 53 7.19	28 15.35	15 34 58.6	2 55 34.5	8.24561	254 216	16 29.6
27.5	10 20 52.34	27 45.15	12 24 0.2	3 10 58.4	8.24777	170	16 34.5
28.0	10 48 11.91	27 19.57	9 0 44.7	3 23 15.5	8.24947	118	16 38.4
28.5	11 15 12.23	27 0.32	5 28 31.4	3 32 13-3	8.25065	110	16 41.1
_		26 48.54	,	-3 37 42.2		+ 62	
29.0	11 42 0.77	26 44.95	+ I 50 49.2	3 39 36.2	8.25127	+ 4	16 42.5
29.5	12 8 45.72	26 49.69	— I 48 47.0	3 37 52.2	8.25131	- 55	16 42.6
30.0	12 35 35.41	27 2.52	5 26 39.2	3 32 31.2	8.25076	112	16 41.3
30.5	13 2 37.93	27 22.64	8 59 10.4	3 23 38.1	8.24964	168	16 38.7
Okt. 1.0	13 30 0.57	27 48.83	12 22 48.5	3 11 20.9	8.24796	218	16 34.9
1.5	13 57 49.40	28 19.14	15 34 9.4	2 55 52.8	8.24578	261	16 29.9
2.0	14 26 8.54	28 51.29	18 30 2.2	2 37 31.2	8.24317	297	16 24.0
2.5	14 54 59.83	29 22.40	21 7 33.4	2 16 38.6	8.24020	324	16 17.3
3.0	15 24 22.23	29 49.22	23 24 12.0	1 53 42.0	8.23696	344	16 10.0
3.5	15 54 11.45		25 17 54.0		8.23352		16 2.4
1.0	76 24 22 72	30 8.65	.6 0 -	-1 29 14.3	0	-356	T
4.0	16 24 20.10	30 17.88	-26 47 8.3	1 3 51.3	8.22996	359	15 54.5
4.5	16 54 37.98	30 14.98	27 50 59.6	0 38 10.9	8.22637	355	15 46.7
5.0	17 24 52.96	29 59.15	28 29 10.5	-0 12 51.1	8.22282	346	15 39.0
5.5	17 54 52.11	29 30.82	28 42 1.6	10 11 34.5	8.21936	331	15 31.5
6.0	18 24 22.93	28 51.62	28 30 27.1	0 34 37-5	8.21605	312	15 24.4
6.5	18 53 14.55	28 4.05	27 55 49.6	0 55 56.8	8.21293	290	15 17.8
7.0	19 21 18.60	27 10.99	26 59 52.8	1 15 19.6	8.21003	264	15 11.7
7·5 8.0	19 48 29.59	26 15.34	25 44 33-2	1 32 39.9	8.20739	237	15 6.2
8.5	2 0 14 44.93 2 0 40 4.76	25 19.83	24 11 53.3	1 47 57.9	8.20502	208	15 1.2
0.5	20 40 4.76	24 26.60	22 2 3 55.4	 -2 1 17.4	8.20294	-178	14 56.9
9.0	21 4 31.36		-20 22 38.0		8.20116		14 53.3
9.5	21 28 8.74	23 37.38	18 9 52.5	2 12 45.5	8.19966	150	14 50.3
10.0	21 51 2.13	22 53.39	15 47 22.3	2 22 30.2	8.19844	122	14 47.7
10.5	22 13 17.59	22 15.46	13 16 43.9	2 30 38.4	8.19750	94	14 45.8
11.0	22 35 I.73	21 44.14	10 39 26.4	2 37 17.5	8.19682	68	14 44.4
11.5	22 56 21.40	21 19.67	7 56 53.5	2 42 32.9	8.19640	42	14 43.5
12.0	23 17 23.65	21 2.25	5 10 24.5	2 46 29.0	8.19621	- 19	14 43.1
12.5	23 38 15.54	20 51.89	2 21 16.5	2 49 8.0	8.19624	-F 3	14 43.2
13.0	23 59 4.20	20 48.66	+ 0 29 14.6	2 50 31.1	8.19647	23	14 43.7
13.5	0 19 56.69	20 52.49	3 19 51.9	2 50 37.3	8.19689	42	14 44.5
* 5. 3	5 50.09		3 -79 34.9		5.19009		+4.)

Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe DurchgD. Sternzeit	Bew. in	Dekl.	Bew. in I ^h Länge
Sont at I	h m	li m s		158.02	07 77 00 0	246"T
Sept. 24 <i>U</i>	7 2.4	7 14 13.48	+74.73		+27 17 33 3	-346.1 -482.9
25 U	19 31.8 8 0.9	7 45 43.65 8 16 53.13	+74.40 +73.85	156.76 154.58	+25 54 39.5 $+24$ 4 58.0	-462.9 -613.4
0	8 0.9 20 29.5	8 16 53.13 8 47 32.73	+73.13	151.80	+21 50 5.4	- 013.4 $-$ 734.2
26 U	8 57.6	9 17 37.11	+72.32	148.75	+19 12 15.2	-842.5
0	21 25.0	9 47 4.82	+71.52	145.74	+16 14 10.9	- 936.1
27 U	9 51.8	10 15 57.91	-1-70.80	143.04	+12 58 59.8	-1013.4
0	22 18.2	10 44 21.34	+70.21	140.85	+ 9 30 7.1	-1072.8
28 U	10 44.1	11 12 22.20	+69.78	139.33	+ 5 51 12.4	-1113.5
0	23 9.9	11 40 8.99	+69.57	138.56	+ 2 6 4.9	-1134.7
2 9 <i>U</i>	11 35.5	12 7 51.14	+69.56	138.60	— I 4I I9.8	—1136.1
_	-		-	-		-
30 0	0 1.3	12 35 38.28	-69.78	139.37	-5272.2	-1117.6
Okt. I O	12 27.3	13 3 39.71	-70.18	140.92	-974.1	-1079.3
Okt. 10	0 53.6	13 32 3.87	-70.76	143.12	—12 37 31.3	-1021.9
2 0	13 20.5	14 0 57.74	-71.49	145.81	-15 54 38.4	946.1
2 U	I 47.9	14 30 25.91	-72.26	148.80	—18 54 52.9	— 853.2
	14 15.9	15 0 30.24 15 31 8.91	-73.05	151.79	—21 35 I.4	-745.3 -624.6
3 O	2 44.5 15 13.6	15 31 8.91 16 2 16.22	-73.75 -74.29	154.48 156.53	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 494.I
4 0	3 43.0	16 33 42.63	<u>−74.59</u>	157.65	-27 9 39.4	— 357·4
U	16 12.5	17 5 15.40	-74.60	157.60	-28 7 18.1	- 218.3
5 O	4 41.8	17 36 39.79	-74.30	156.29	$-28\ 37\ 11.3$	80.4
U	17 10.8	18 7 40.63	-73.67	153.75	-28 39 57.5	+ 52.4
6 0	5 39.1	18 38 3.99	-72.76	150.12	—28 16 55.0	+ 177.1
U	18 6.6	19 7 38.50	-71.64	145.68	-27 29 53.0	+ 291.9
7 0	6 33.2	19 36 16.20	-70.36	140.73	-26 2I 0.8	+ 395.3
U	18 58.8	20 3 52.74	68.98	135.55	-24 52 38.1	+ 487.0
8 0	7 23.3	20 30 27.24	-67.60	130.43	-23 7 5.7	+ 567.0
U	19 46.9	20 56 1.61	-66.25	125.56	<u>-21</u> 6 40.5	+ 635.9
90	8 9.5	21 20 40.01	-65.00	121.11	—18 53 31.2	+ 694.4
U	20 31.3	21 44 28.13	-63.87	117.18	—16 29 35.7	+ 743.6
10 0	8 52.3	22 7 32.75	-62.90	113.83	-13 56 42.1	+784.2
U	21 12.8	22 30 1.22	-62.09	111.13	11 16 29.9	+ 816.9
11 0	9 32.7	22 52 1.29	61.47	109.08	- 8 30 30.2	+ 842.1
U	21 52.4	23 13 40.84	-61.04	107.68	- 5 40 9.2	+ 860.4
12 0	10 11.8	23 35 7.76	60.80	106.95	- 2 46 48.9	+ 871.9
U	22 31.1	23 56 30.02	-60.75	106.87	+ 0 8 9.9	+ 876.8
13 0	10 50.5	0 17 55.48	-60.91	107.45	+ 3 3 26.1	+ 874.8
U	23 10.1	0 39 32.04	-61.26	108.69	+ 5 57 36.4	+ 865.7

Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Okt. 13.0	h m s	m 9	1 0 20 746	g / W	0 10645		14 43.7
3	23 59 4.20	20 52.49	+ 0 29 14.6	+2 50 37.3	8.19647 8.19689	+ 42	
13.5	0 19 56.69	21 3.37	3 19 51.9	2 49 24.6		59	14 44.5
14.0	0 41 0.06	21 21.22	6 9 16.5 8 56 5.9	2 46 49.4	8.19748 8.19824	76	14 45.7
14.5	1 2 21.28	21 45.86	3 37	2 42 46.7		16	14 47.3
15.0	1 24 7.14	22 17.12	11 38 52.6	2 37 11.1	8.19915	105	14 49.1
15.5 16.0	1 46 24.26 2 9 18.84	22 54.58	14 16 3.7	2 29 55.2		119	14 53.7
16.5	1 '	23 37-57	16 45 58.9	2 20 52.8	8.20139	132	. 23.
-	2 32 56.41	24 25.23	19 6 51.7	2 9 56.9	8.20271	145	14 56.5
17.0	2 57 21.64	25 16.20	21 16 48.6	1 57 1.5	8.20416	159	14 59.5 15 2.8
17.5	3 22 37.84	26 8.69	23 13 50.1	+1 42 3.4	8.20575	+172	15 2.8
18.0	3 48 46.53	,	+24 55 53.5	+1 42 3.4	8.20747		15 6.3
18.5	4 15 47.08	27 0.55	26 20 55.5	1 25 2.0	8.20931	184	15 10.2
19.0		27 49.17	27 26 57.4	1 6 1.9	8.21130	199	15 14.4
19.5		28 31.82		0 45 13.0	8.21342	212	15 18.8
20.0		29 5.90		+0 22 51.8	8.21567	225	15. 23.6
	5 41 13.97 6 10 43.27	29 29.30	22	-0 0 39.3	8.21804	237	15. 23.0
20.5 21.0	1	29 40.73	2 2	0 24 52.5	8.22053	249	,
		29 40.04	28 9 30.4	0 49 17.1		259	15 34.0
21.5	7 10 4.04	29 28.21	27 20 13.3	1 13 21.7	8.22312	267	15 39.6
22.0	7 39 32.25	29 7.21	26 6 51.6	1 36 36.1	8.22579	272	15 45.4
22.5	8 8 39.46	28 39.68	24 30 15.5	-т 58 33.7	8.22851	+273	15 51.3
23.0	8 37 19.14	٠,	+22 31 41.8		8.23124		15 57.3
23.5	9 5 27.75	28 8.61	20 12 49.4	2 18 52.4	8.23395	271	16 3.3
24.0	9 33 4.69	27 36.94	17 35 36.0	2 37 13.4	8.23658	263	16 9.2
24.5	10 0 12.05	27 7.36	14 42 14.2	2 53 21.8	8.23907	249	16 14.8
25.0	10 26 54.08	26 42.03	11 35 9.0	3 7 5.2	8.24137	230	16 20.0
25.5	10 53 16.88	26 22.80	8 16 56.7	3 18 12.3	8.24341	204	16 24.6
26.0	11 19 27.83	26 10.95	3 /	3 26 32.6	8.24513	172	16 28.5
26.5	7 7 3	26 7.39	4 50 24.1 + 1 18 28.2	3 31 55.9	8.24647	134	16 31.5
2 7.0		26 12.53		3 34 12.2	8.24739	92	16 33.6
	12 11 47.75	26 26.46	- 2 15 44.0	3 33 12.2		1- 44	16 34.6
27.5	12 38 14.21	26 48.89	5 48 56.2	-3 28 48.6	8.24783	- 6	10 34.0
28.0	13 5 3.10	20 40.09	- 9 17 44.8	3 20 4010	8.24777	ū	16 34.5
28.5	13 32 22.04	27 18.94	12 38 40.3	3 20 55.5	8.24720	57	16 33.2
29.0	14 0 17.25	27 55.21	15 48 12.1	3 9 31.8	8.24610	110	16 30.7
29.5	14 28 52.90	28 35.65	18 42 54.0	2 54 41.9	8.24450	160	16 27.0
30.0	14 58 10.35	29 17.45	0	2 36 35.8	8.242.46	204	16 22.4
30.5		29 57.23	, ,	2 15 32.7	8.24201	245	16 16.9
5 5	, , ,	30 31.16	23 35 2.5	1 52 0.1		280	16 10.6
31.0	15 58 38.74	30 55.41	25 27 2.6	1 26 34.9	8.23721	308	
31.5 Nov. 1.0	16 29 34.15	31 6.72	26 53 37.5	I 0 0.1	8.23413	328	31
	17 0 40.87	31 2.91	27 53 37.6	0 33 3.1	8.23085	340	15 56.5
1.5	17 31 43.78		28 26 40.7		8.22745		15 49.0

Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe DurchgD. Sternzeit	Bew. in I ^h Länge	Dekl.	Bew. in I ^h Länge
Okt. 13 0	, ,	o 17 55.48 o 39 32.04	-60.91 -61. 2 6	107.45	+ 3 3 26.1 + 5 57 36.4	+ 874. ["] 8 + 865.7
14 <i>0</i>		I I 27.47 I 23 49.44	-61.79 +62.52	110.56	+ 8 49 13.4 +11 36 43.8	+ 849.1 + 824.5
15 0	3 3 3	1 46 45.45	+63.41	116.37	+14 18 27.9	+ 791.3
16 <i>U</i>		2 10 22.51	+64.46 +65.63	120.08	+16 52 37.2	+ 748.6 + 695.7
17 U	1 18.5	2 34 47.05 3 0 4.36	+66.90	128.89	+19 17 14.5 +21 30 13.8	+ 632.0
0 18 U	3 1 7	3 26 18.30	+68.21	133.71	+23 29 21.2	+ 556.9
0	14 34.0	3 53 30.52 4 21 40.05	+69.52 +70.76	138.57	+25 12 17.4 $+26$ 36 42.3	+470.1 +371.7
19 U	_	4 50 42.74	+71.86	147.35	+27 40 20.7	+ 262.4
0	15 28.7	5 20 31.09	+72.75	150.73	+28 21 9.7	+ 143.7
20 U	5 51	5 50 54.46	+73.39	153.11	+28 37 27.6	+ 17.7
0 21 <i>U</i>	16 25.7	6 21 39.87	+73.72	154.32	+28 28 2.5	- 113.0
0	4 54.6	6 52 33.06 7 23 20.15	+73.76 +73.52	154.35	+27 52 17.4 +26 50 13.2	-245.2 -375.6
22 U	. 55	7 53 48.96	+73.03	151.30	+25 22 30.0	-501.2
0	18 19.7	8 23 50.15	+72.38	148.69	+23 30 22.2	- 619.3
23 U		8 53 17.95	+71.63	145.76	+21 15 32.7	- 727.9
0	19 14.0	9 22 10.18	+70.85	142.81	+18 40 7.3	— 825.0
24 U	, .	9 50 28.09	+70.13	140.10	+15 46 30.0	— 90 9 .6
0	20 6.0	10 18 15.81	+69.51	137.83	+12 37 18.6	980.5
25 U O	8 31.3 20 56.4	10 45 39.73	+69.05 +68.76	136.18 135.27	+ 9 15 22.4 + 5 43 41.5	1036.8 1077.6
26 U		11 39 49.88	+68.71	135.17	+ 3 43 41.5 $+$ 2 5 27.0	-1102.1
0	21 46.5	12 6 55.33	+68.86	135.91	— I 35 59.2	-1109.4
27 U	10 11.8	12 34 14.47	+69.24	137.49	- 5 I7 4.9	-1098.6
o	22 37.4	13 1 57.20	+69.83	139.87	- 8 54 8. 2	-1068.7
28 U	11 3.6	13 30 12.51	+70.61	142.94	-12 23 18.7	-1019.5
0	23 30.5	13 59 7.88	+71.51	146.55	—15 40 4 2. 7	- 950.9
29 U	11 58.1	14 28 48.43	-72.50	150.28	—18 42 2 8.5	— 863. 2
	=	-	-	-	-	-
30 O	0 26.5	14 59 15.95	<i>─</i> 73.47	154.16	-21 24 53.4	- 757.6
U	12 55.7	15 30 28.14	−74.35	157.66	-23 44 34.7	- 636.2
31 <i>O</i>	1 25.5	16 2 17.98	-75.04	160.39	-25 38 41.1	- 502.3
Nov. 10	13 55.7 2 26.1	16 34 33.71 17 6 59.66	-75·44	161.97 162.10	-27 5 4.9 -28 2 30.7	-359.9
U U	14 56.3	17 6 59.66 17 39 17.59	-75.51 -75.19	160.68	$-28 \ 230.7$ $-28 \ 30 \ 41.9$	-213.5 -68.2
U	14 50.3	1/ 39 1/.59	75.19	100.00	20 30 41.9	00.2

Dati	um	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Nov.	1.0	17 0 40.87 17 31 43.78	m a 31 2.91	-27 53 37.6 28 26 40.7	-0 33 3.1	8.23085 8.22745	-340	15 56.5 15 49.0
	2.0	18 2 27.11	30 43.33	28 33 12.1	-0 6 31.4	8.22400	345	15 41.5
	2.5	18 32 36.13	30 9.02	28 14 20.0	+0 18 52.1	8.22057	343	15 34.1
	3.0	19 1 58.47	29 22.34	27 31 46.3	0 42 33.7	8.21722	335	15 26.9
	3.5	19 30 25.18	28 26.71	26 27 36.6	I 4 9.7	8.21402	320	15 20.1
	4.0	19 57 50.99	27 25.81	25 4 9.3	1 23 27.3	8.21101	301	15 13.8
	4.5	20 24 14.10	26 23.11	23 23 46.4	1 40 22.9	8.20823	278	15 7.9
	5.0		25 21.69	21 28 45.8	1 55 0.6	8.20573	250	15 2.7
	-	20 49 35.79	24 23.91		2 7 28.9		221	14 58.1
	5.5	21 13 59.70	23 31.47	19 21 16.9	+2 17 58.9	8.20352	-188	14 50.1
	6.0	21 37 31.17	23 31.4/	—17 3 18.0		8.20164		14 54.2
	6.5	22 0 16.77	22 45.60	14 36 35.4	2 26 42.6	8.20006	158	14 51.0
	7.0	1,7	22 6.91		2 33 50.6	8.19883	123	14 48.5
		22 22 23.68	21 35.86		2 39 32.2		90	14 46.7
	7.5	22 43 59.54	21 12.57	9 23 12.6	2 43 54.9	8.19793	58	
	8.0	23 5 12.11	20 57.14	6 39 17.7	2 47 4.2	8.19735	— 27	14 45.5
	8.5	23 26 9.25	20 49.49	3 52 13.5	2 49 2.3	8.19708	+ 2	14 44.9
	9.0	23 46 58.74	20 49.58	— I 3 II.2	2 49 50.5	8.19710	30	14 45.0
	9.5	0 7 48.32	20 57.36	+ 1 46 39.3	2 49 26.2	8.19740	54	14 45.6
	10.0	0 28 45.68	21 12.70	4 36 5.5	2 47 46.2	8.19794	80	14 46.7
	10.5	0 49 58.38		7 23 51.7		8.19874		14 48.3
		0	21 35.47	. 0 6	+2 44 45.2		+100	
	11.0	1 11 33.85	22 5.44	+10 8 36.9	2 40 15.1	8.19974	116	14 50.3
	11.5	1 33 39.29	22 42.23	12 48 52.0	2 34 7.6	8.20090	133	14 52.7
	12.0	I 56 21.52	23 25.28	15 22 59.6	2 26 13.9	8.20223	146	14 55.5
	12.5	2 19 46.80	24 13.65	17 49 13.5	2 16 24.0	8.20369	156	14 58.5
	13.0	2 44 0.45	25 6.03	20 5 37.5	2 4 30.0	8.20525	166	15 1.7
	13.5	3 9 6.48	26 0.62	22 10 7.5	1 50 25.0	8.20691	171	15 5.2
	14.0	3 35 7.10	26 55.12	24 0 32.5		8.20862	176	15 8.7
	14.5	4 2 2.22	27 46.74	25 34 39.9		8.21038	180	15 12.4
	15.0	4 29 48.96		26 50 19.8	1 15 39.9	8.21218	183	15 16.2
	15.5	4 58 21.34	28 32.38	27 45 32.3	0 55 12.5	8.21401	103	15 20.1
	•	' ' ' ' '	29 9.10	, ,,,,,,,,	+0 33 2.1		+184	
	16.0	5 27 30.44	29 34-34	+28 18 34.4	+0 9 34.8	8.21585	186	15 24.0
	16.5	5 57 4.78		28 28 9.2		8.21771	186	15 28.0
	17.0	6 26 51.30	29 46.52	28 13 30.1	-0 14 39.1	8.21957		15 32.0
	17.5	6 56 36.44	29 45.14	27 34 25.6	0 39 4.5	8.22144	187	15 36.0
	18.0	7 26 7.61	29 31.17	26 31 19.7	1 3 5.9	8 22220	186	15 40.0
	18.5	7 55 14.26	29 6.65	25 5 9.0	1 26 10.7	8.22517	187	15 44.0
	19.0	8 23 48.66	28 34.40	23 17 17.0	1 47 52.0	8.22702	186	15 48.1
	19.5	8 51 46.39	27 57.73	21 9 29.1	2 7 47.9	8 22888	185	15 52.
	20.0	9 19 6.18	2/ 19./9	18 43 45.9	2 25 43.2	8.23069	181	15 56.1
		1 / /	26 43.57	1 10 10 2	2 41 20.1		178	16 0.0
	20.5	9 45 49.75		16 2 17.8		8.23247		10 0.

Im Meridian von Berlin.

ι	atum and anation	Mittlere Zeit	AR.	Halbe DurchgD. Sternzeit	Bew. in	Dekl.	Bew. in
Nov.	I 0	2 20. I	17 ^h 6 ^m 59.66	-75.51	162.10	-28° 2 30.7	-213.5
	U	14 56.3	17 39 17.59	75.19	160.68	-28 30 41.9	-68.2
	2 0	3 26.1	18 11 9.10	-74.50	157.77	-28 30 19.9	+ 71.3
	U	15 55.2	18 42 17.50	-73.50	153.59	-28 2 56.5	+201.4
	30	4 23.4	19 12 29.58	-72.25	148.48	-27 10 41.4	+319.6
	U	16 50.4	19 41 36.59	-70.83	142.83	-25 56 8.0	+424.2
	4 0	5 16.4	20 9 34.29	-69.33	137.00	-24 21 59.9	+515.3
	U	17 41.1	20 36 22.53	-67.83	131.31	-22 30 58.5	+593.2
	5 0	6 4.8	21 2 4.41	-66.40	125.96	-20 25 36.5	+658.9
	U	18 27.4	21 26 45.34	-65.07	121.15	-18 8 13.3	+713.6
	6 <i>o</i>	6 49.2	21 50 32.44	-63.90	116.98	—15 40 53.2	+758.5
	U	19 10.2	22 13 33.72	-62.89	113.50	—13 5 2 6.1	-+794.8
	7 0	7 30.5	22 35 57.72	-62.09	110.74	—10 23 29.8	+823.5
	U	19 50.5	22 57 53.19	61.48	108.72	— 7 36 3 1. 5	+845.2
	8 0	8 10.0	23 19 28.91	-61.07	107.41	- 4 45 51.7	+860.5
	U	20 29.4	23 40 53.61	-6o.88	106.84	— I 52 45.9	+869.6
	90	8 48.8	0 2 15.98	60.89	106.99	+ 1 1 31.8	+872.5
	U	21 8.2	0 23 44.58	-61.11	107.85	+ 3 55 46.0	+868.8
	10 0	9 27.9	0 45 27.89	-61.53	109.42	+64837.6	+858.5
	U	21 48.0	1 7 34.28	-62.15	111.67	+ 9 38 42.0	-+840.8
	11 O	10 8.6	1 30 11.94	-62.96	114.59	+12 24 25.7	+814.9
	U	22 29.8	I 53 28.69	-63.93	118.15	+15 4 5.3	-1-780.0
	12 O	10 51.9	2 17 31.79	65.06	122.28	+17 35 46.6	-1-735.0
	U	23 14.8	2 42 27.58	66.31	126.89	+19 57 23.1	+-678.9
	13 0	11 38.6	3 8 20.94	-67.62	131.84	+22 6 37.0	+611.1
	-			-	-	-	-
	14 U	0 3.5	3 35 14.74	+68.97	137.15		+530.7
	O	12 29.3	4 3 9.13	+70.26	142.12	+25 38 7.5	+437.7
	15 U	0 56.2	4 32 0.94	+71.44	146.65	+26 55 23.9	+332.6
	0	13 23.8	5 I 43.23	+72.43	150.44	+27 50 33.3	+-216.7
	16 U	1 52.1	5 32 5.41	+73.15	153.20	+28 21 38.3	+ 92.2
	0	14 20.9	6 2 53.82	+73.57	154.72	$+28 \ 27 \ 12.6$	- 37.9
	17 U	2 49.8	6 33 52.96	+73.67	154.92	+28 6 28.9	-170.1
	0	15 18.7	7 4 47.05	+73.45	153.85	+27 19 23.4	-30r.0
	18 U	3 47.2	7 35 21.87	+72.94	151.70	+26 6 34.5	-426.9
	0	16 15.2	8 5 25.96	+72.25	148.74	-1-2.1 29 18.8	-544.9
	19 U	4 42.6	8 34 51.70	+71.40	145.33	+-22 29 23.6	-653.T
	0	17 9.3	9 3 35.39	+70.51	141.79	+20 8 57.6	749.7
	20 U	5 35.3	9 31 37.21	+69.65	138.40	+17 30 24.1	-834.2
	0	18 0.6	9 59 0.52	-+-68.88	135.42	+14 36 12.7	906.0

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Nov. 20.0	9 19 6.18	m a	+18° 43′ 45.9	0 1 1	8.23069		15 56.1
20.5	9 45 49.75	26 43.57	16 2 17.8	-24128.1	8.23247	+178	16 0.0
21.0	10 12 1.24	26 11.49	13 7 20.6	2 54 57.2	8.23417	170	16 3.8
21.5	10 37 46.66	25 45.42	10 1 14.8	3 6 5.8	8.23578	161	16 7.4
22.0	11 3 13.50	25 26.84	6 46 24.3	3 14 50.5	8.23729	151	16 10.8
22.5	II 28 30.25	25 16.75	3 25 16.4	3 21 7.9	8.23863	134	16 13.8
23.0	11 53 46.00	25 15.75	+ 0 0 23.3	3 24 53.1	8.23977	114	16 16.3
-	12 19 10.18	25 24.18	3,3	3 25 59.4	8.24069	92	16 18.4
23.5		25 42.03	,	3 24 19.2	. /	63	16 19.8
24.0	12 44 52.21	26 8.93	6 49 55.3	3 19 43.5	8.24132	- 1 - 34	16 20.6
24.5	13 11 1.14	26 44.05	10 9 38.8	-3 12 4.2	8.24166	0	10 20.0
25.0	13 37 45.19		-13 21 43.0		8.24166	- 37	16 20.6
25.5	14 5 11.19	27 26.00	16 22 57.5	3 1 14.5	8.24129	- 31	16 19.8
26.0	14 33 23.98	28 12.79	19 10 8.2	2 47 10.7	8.24056	73	16 18.1
26.5	15 2 25.51	29 1.53	21 40 3.7	2 29 55.5	8.23944	112	16 15.6
27.0	15 32 14.18	29 48.67	23 49 43.6	2 9 39.9	8.23795	149	16 12.2
27.5	16 2 44.30	30 30.12	25 36 27.6	1 46 44.0	8.23611	184	16 8.1
28.0	16 33 45.83	31 1.53	26 58 7.3	1 21 39.7	8.23394	217	16 3.3
28.5	17 5 4.97	31 19.14	27 53 16.3	0 55 9.0	8.23151	243	15 57.9
29.0	17 36 25.24	31 20.27	28 21 17.0	0 28 0.7	8.22883	268	15 52.0
29.5	18 7 29.11	31 3.87	28 22 23.5	−o 1 6.5	8.22599	284	15 45.8
-9.5	, -5	30 30.93	5.5	+0 24 44.5		-296) 1)
30.0	18 38 0.04	29 43.93	-27 57 39.0	0 48 52.0	8.22303	301	15 39.4
30.5	19 7 43.97	28 46.60	27 8 47.0	1 10 46.7	8.22002	301	15 32.9
Dez. 1.0	19 36 30.57	27 43.02	25 58 0.3	1 30 12.2	8.21701	293	15 26.5
1.5	20 4 13.59	26 37.24	24 27 48.1	1 47 3.0	8.21408	281	15 20.2
2.0	20 30 50.83	25 32.58	22 40 45.1	2 1 22.6	8.21127	264	15 14.3
2.5	20 56 23.41	24 31.76	20 39 22.5	2 13 20.9	8.20863	242	15 8.8
3.0	21 20 55.17	23 36.63	18 26 1.6	2 23 10.4	8.20621	215	15 3.7
3.5	21 44 31.80	22 48.50	16 2 51.2	2 31 6.0	8.20406	187	14 59.3
4.0	22 7 20.30	22 48.50	13 31 45.2		8.20219		14 55.4
4.5	22 29 28.43	22 0.13	10 54 24.8	2 37 20.4	8.20064	155	14 52.2
		21 35.88	0	+2 42 5.8		-123	
5.0	22 51 4.31	21 11.93	- 8 12 19.0	2 45 31.8	8.19941	87	14 49.7
5.5	23 12 16.24	20 56.36	5 26 47.2	2 47 45.4	8.19854	53	14 47.9
6.0	23 33 12.60	20 49.14	2 39 1.8	2 48 50.9	8.19801	- 17	14 46.8
6.5	23 54 1.74	20 50.18	+ 0 9 49.1	2 48 50.7	8.19784	+ 17	14 46.5
7.0	0 14 51.92	20 59.45	2 58 39.8	2 47 43.0	8.19801	50	14 46.8
7.5	0 35 51.37	21 16.85	5 46 22.8	2 45 24.8	8.19851	81	14 47.8
8.0	0 57 8.22	21 42.29	8 31 47.6	2 41 49.7	1 8 TOO 22.	110	14 49.5
8.5	1 18 50.51	22 15.53	11 13 37.3	2 36 49.7	1 8 20042	137	14 51.8
9.0	1 41 6.04	22 56.17	13 50 27.0	2 30 14.5	8.20179	160	14 54.6
9.5	2 4 2.21	22 50.1/	16 20 41.5	2 30 14.5	8.20339	100	14 57.9

		lm Merid	ian von	Berlin.	Bibl. Jag	ag.	
Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg, -D. Sternzeit	Bew. in 1 ^h Länge	Dekl.	Bew. in 1 ^h Länge	
Nov. 20 U	5 35·3	9 31 37.21	+69.65	138.40	+17°30′24.I	— 8 34.2	
0	18 0.6	9 59 0.52	+68.88	135.42	+14 36 12.7	— 906.0	
21 U	6 25.4	10 25 51.33	+68.24	133.03	+11 28 57.5	- 964.7	
0	18 49.8	10 52 17.50	+67.78	131.37	+ 8 11 15.6	-1010.4	
22 U	7 14.0	11 18 28.33	+67.54	130.52	+ 4 45 46.2	-1042.6	
0	19 38.0	11 44 34.02	+67.51	130.56	+ 1 15 12.4	-1060.9	
23 U	8 2.2	12 10 45.21	+67.74	131.50	— 2 17 36.4	-1064.8	
O	20 26.6	12 37 12.76	+68.18	133.32	— 5 49 42.5	-10536	
24 U	8 51.5	13 4 7.23	+68.85	136.02	— 9 1 7 57.7	-1026.2	
0	21 16.9	13 31 38.46	+69.71	139.48	— 12 39 3.3	- 981.7	
25 U	9 43.2	13 59 54.91	+70.73	143.55	—15 49 2 9.9	- 919.5	
o	22 10.3	14 29 2.84	+71.84	148.02	-184541.7	- 839.0	
26 U	10 38.2	14 59 5.34	+72.96	152.59	—21 24 0.5	— 74°.7	
0	23 7.1	15 30 1.36	+74.00	156.86	-23 40 57.6	-625.6	
27 U	11 36.8	16 1 44.79	+74.87	160.39	$-25\ 33\ 24.4$	— 496. 1	
28 0	0 7 7	16 24 125	77.44	162.67	26 18 15 0	075 5	
U	0 7.1	16 34 4.25	-75·44		-26 58 47.9	- 355·7	
	12 37.7	17 6 43.50	-75.66	163.57	-27 55 24.9	209.1	
29 0	1 8.3	17 39 23.00	-75.48	162.75	28 22 32.1	-61.5	
U	13 38.5	18 11 42.01	−74.88	160.23	—28 20 30.I	+ 81.6	
30 0	2 8.1	18 43 21.36	-73.93	156.23	-275039.5	+ 215.7	
U	14 36.8	19 14 5.24	-72.69	151.10	-26559.1	+ 337.7	
Dez. 1 0	3 4.4	19 43 42.72	-71.25	145.27	-25 36 39.I	+ 445.5	
U	15 30.8	20 12 8.01	-69.71	139.18	-23 58 5.5	+ 538.2	
2 0	3 55.9	20 39 20.04	-68.16	133.11	-22 2 26.3	+ 616.4	
U	16 19.9	21 5 21.50	-66.68	127.42	-19 52 29.9	+ 681.1	
30	4 42.8	21 30 17.87	65.29	122.27	-17 30 50.7	+ 733.8	
U	17 4.8	21 54 16.54	-64.07	117.80	—14 59 45.4	+ 775.8	
4 0	5 25.9	22 17 26.03	-63.04	114.06	—12 2I 12.9	+ 808.5	
U	17 46.4	22 39 55.37	-62.20	111.08	— 9 <u>36 56.4</u>	+ 833.1	
5 0	6 6.3	23 1 53.91	-61.57	108.90	6 48 26.9	+ 850.8	
U	18 25.9	23 23 31.04	-61.16	107.49	— 3 57 4.4	+ 862.0	
6 0	6 45.3	23 44 56.13	-60.96	106.85	— I 4 2.7	+ 867.4	
U	19 4.7	0 6 18.45	-6o. 9 9	106.99	+ 1 49 28.7	+ 866.9	
7 0	7 24.1	0 27 47.16	-61.23	107.88	+ 4 42 19.5	+ 860.5	
U	19 43.8	0 49 31.43	-61.70	109.54	+ 7 33 16.9	+ 848.0	
8 0	8 4.0	1 11 40.27	62.36	111.96	+10 21 2.8	+ 828.4	
U	20 24.6	1 34 22.60	-63.22	115.10	+13 4 9.3	+ 801.2	
9 0	8 46.0	1 57 47.01	-64.27	118.93	+15 40 57.4	+ 765.2	
U	21 8.2	2 22 1.50	-65.47	123.41	+18 9 34.9	+ 719.2	
		1	3 17	,	1	, ,	

Dat	um	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff,	Halbm.
Dez.	9.0	1 41 6.04	22 56.17	+13 50 27.0		8.20179	+-16 0	14 54.6
	9.5	2 4 2.21		16 20 41.5	+2 30 14.5	8.20339	180	14 57.9
	10.0	2 27 45.80	23 43.59 24 36.78	18 42 34.1	2 21 52.6	8.20519	197	15 1.6
	10.5	2 52 22.58		20 54 6.5	2 11 32.4	8.20716	208	15 5.7
	0.11	3 17 56.79	25 34.21 26 33.71	22 53 9.0	1 59 2.5 1 44 14.3	8.20924	217	15 10.0
	11.5	3 44 30.50	27 32.61	24 37 23.3	1 27 3.8	8.21141	221	15 14.6
	12.0	4 12 3.11	28 27.58	26 4 27.1		8.21362	222	15 19.3
	12.5	4 40 30.69	29 15.07	27 12 0.9	1 7 33.8	8.21584	220	15 24.0
	13.0	5 9 45.76	29 51.63	27 57 56.5	0 45 55.6 +0 22 30.8	8.21804	214	15 28.7
	13.5	5 39 37.39	29 51.03	28 20 27.3	10 22 30.0	8.22018	214	15 33.3
			30 14.49	_	-o 2 9.8		+204	
	14.0	6 9 51.88	30 22.16	4-28 18 17.5	0 27 28.3	8.22222	193	15 37.7
	14.5	6 40 14.04	30 14.47	27 50 49.2	0 52 41.9	8.22415	180	15 41.8
	15.0	7 10 28.51	29 53.01	26 58 7.3	1 17 8.6	8.22595	166	15 45.7
	15.5	7 40 21.52	29 20.49	25 40 58.7	1 40 11.5	8.22761	151	15 49.4
	16.0	8 9 42.01	28 40.46	24 0 47.2	2 1 20.5	8.22912	134	15 52.7
	16.5	8 38 22.47	27 56.64	21 59 26.7	2 20 14.0	8.23046	119	15 55.6
	17.0	9 6 19.11	27 12.60	19 39 12.7	2 36 39.4	8.23165	105	15 58.2
	17.5	9 33 31.71	26 31.36	17 2 33.3	2 50 30.1	8.23270	89	16 0.5
	18.0	10 0 3.07	25 55.30	14 12 3.2		8.23359	76	16 2.5
	18.5	10 25 58.37	25 55.30	11 10 17.9	3 1 45.3	8.23435	/0	16 4.2
			25 26.21		-3 10 26.5		+ 63	
	19.0	10 51 24.58	25 5.41	+ 7 59 51.4	3 16 36.6	8.23498	49	16 5.6
	19.5	11 16 29.99	24. 53.62	4 43 14.8	3 20 18.2	8.23547	37	16 6.7
	20.0	11 41 23.61	24 51.35	+ 1 22 56.6	3 21 32.6	8.23584	24	16 7.5
	20.5	12 6 14.96	24 58.76	— I 58 36.0	3 20 19.4	8.23608	+ 10	16 8.1
	21.0	12 31 13.72	25 15.70	5 18 55.4	3 16 36.1	8.23618	-	16 8.3
	21.5	12 56 29.42	25 41.73	8 35 31.5	3 10 19.1	8.23615	3	16 8.2
	22.0	13 22 11.15	26 15.99	11 45 50.6	3 I 23.0	8.23596		16 7.8
	22.5	13 48 27.14	26 57.11	14 47 13.6	2 49 43.1	8.23562	34	16 7.0
	23.0	14 15 24.25	- '	17 36 56.7	2 35 16.1	8.23510	52	16 5.9
	23.5	14 43 7.39	27 43.14	20 12 12.8	2 33 10.1	8.23438	72	16 4.3
			28 31.36		-2 18 3.2		- 91	
	24.0	15 11 38.75	29 18.37	-22 30 16.0	1 58 11.0	8.23347	112	16 2.3
	24.5	15 40 57.12	30 0.27	24 28 27.0	1 35 55.3	8.23235	133	15 59.8
	25.0	16 10 57.39	30 32.94	26 4 22.3	I II 41.2	8.23102	154	15 56.8
	25.5	16 41 30.33	30 52.68	27 16 3.5	0 46 4.1	8.22948	174	15 53.4
	26.0	17 12 23.01	30 56.74	28 2 7.6	-0 19 47.1	8.22774	193	15 49.6
	26.5	17 43 19.75	30 43.99	28 21 54.7	+0 6 22.6	8.22581	209	15 45.4
	27.0	18 14 3.74		28 15 32.1	0 31 38.7	8.22372	_	15 40.9
	27.5	18 44 18.75	30 15.01	27 43 53.4		8.22149	223	15 36.1
	28.0	19 13 50.79	29 32.04	26 48 32.6	0 55 20.8	8.21916	233	15 31.1
	28.5	19 42 29.27	28 38.48	25 31 35.0	1 16 57.6	8.21676	240	15 25.9

Υ	MT.			D 1!
$_{\rm 1m}$	m e	rialan	von	Berlin.

			Im Merid	ian von	Berlin.		
n	tum nd ination	Mittlere Zeit	AR.	Halbe DurchgI). Sternzeit	Bew. in I ^h Länge	Dekl.	Bew. in I ^h Länge
Dez.	9 0 U 10 0 U 11 0 U 12 0 U 13 0	8 ^h 46.0 21 8.2 9 31.4 21 55.6 10 20.9 22 47.3 11 14.7 23 43.0 12 12.0	1 57 47.01 2 22 1.50 2 47 13.15 3 13 27.42 3 40 47.52 4 9 13.56 4 38 41.72 5 9 3.85 5 40 7.60	-64.27 -65.47 -66.80 -68.20 -69.62 -70.98 -72.21 -73.20 +73.89	118.93 123.41 128.41 133.81 139.35 144.75 149.66 153.72 156.57	+15 40 57.4 +18 9 34.9 +20 27 54.4 +22 33 34.2 +24 24 0.2 +25 56 30.4 +27 8 22.9 +27 57 7.6 +28 20 37.8	+ 765.2 + 719.2 + 661.9 + 592.4 + 509.4 + 412.9 + 303.2 + 181.8 + 51.2
	14 <i>U</i> 0 15 <i>U</i> 0	0 41.4 13 11.0 1 40.4 14 9.3	6 11 36.72 6 43 13.57 7 14 40.11 7 45 40.48	+74.25 +74.23 +73.88 +73.23	158.02 157.86 156.26 153.49	+28 17 24.1 +27 46 44.4 +26 48 48.5 +25 24 37.8	- 84.9 - 222.3 - 356.8 - 484.3
	16 <i>U</i> 0 17 <i>U</i> 0 18 <i>U</i>	2 37.7 15 5.2 3 31.9 15 57.9 4 23.0	8 16 2.37 8 45 38.04 9 14 24.19 9 42 21.80 10 9 35.13	+72.36 +71.37 +70.35 +69.38 +68.51	149.89 145.83 141.69 137.78 134.36	+23 35 57.0 +21 25 4.9 +18 54 41.6 +16 7 37.9 +13 6 49.2	- 601.3 - 705.8 - 796.3 - 872.3 - 933.8
	0 19 <i>U</i>	16 47.6 5 11.7	10 36 11.05	+67.79 +67.28	131.61	+9557.7 +63521.4	- 981.1 -1014.5
	0 20 <i>U</i> 0	17 35.5 5 59.1 18 22.8	11 28 6.78 11 53 47.12 12 19 30.21	+66.99 +66.93 +67.12	128.53 128.33 129.04	+ 3 10 14.0 - 0 17 34.2 - 3 45 24.5	-1034.6 -1041.4 -1034.8
	2I <i>U</i> 0 22 <i>U</i>	6 46.7 19 11.0 7 35.9	12 45 27.17 13 11 48.65 13 38 44.61	+67.54 +68.18 +69.00	130.67 133.16 136.44	- 7 10 35.6 -10 30 22.7 -13 41 54.4	-1014.7 - 980.7 - 931.9
	0 23 U 0	20 1.5 8 28.0 20 55.3	14 6 23.70 14 34 52.59 15 4 15.09	+69.99 +71.08 +72.19	140.36 144.72 149.24	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	- 868.0 - 788.6 - 693.4
	24 <i>U</i> 0 25 <i>U</i>	9 23.5 21 52.5 10 22.2	15 34 31.11 16 5 35.93 16 37 19.88	+73.24 +74.13 +74.76	153.56 157.29 159.96	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	- 583.1 - 459.4 - 325.2
	0 26 <i>U</i> 0 27 <i>U</i>	22 52.3 11 22.5 23 52.4 12 21.9	17 9 28.36 17 41 43.18 18 13 44.55 18 45 13.32	+75.05 +74.97 +74.49 -73.64	161.25 160.92 158.94 155.62	-27 58 54.9 -28 21 32.1 -28 15 44.3 -27 42 32.9	$ \begin{array}{rrr} - & 184.2 \\ - & 41.2 \\ + & 99.1 \\ + & 232.0 \end{array} $
	28 O U	o 50.5 13 18.1	19 15 53.18 19 45 32.14	-72.50 -71.14	151.01 145.58	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ 353.8 + 462.2

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbın.
Dez. 28.0 28.5 29.0 29.5 30.0 30.5 31.0 31.5 32.0	19 13 50.79 19 42 29.27 20 10 7.45 20 36 42.49 21 2 14.89 21 26 47.87 21 50 26.63 22 13 17.73 22 35 28.57	28 38.48 27 38.18 26 35.04 25 32.40 24 32.98 23 38.76 22 51.10 22 10.84	-26° 48' 32.6 25 31 35.0 23 55 25.0 22 2 36.1 19 55 41.1 17 37 5.7 15 9 4.2 12 33 38.0 9 52 34.5	+1 16 57.6 1 36 10.0 1 52 48.9 2 6 55.0 2 18 35.4 2 28 1.5 2 35 26.2 2 41 3.5		240 243 240 234 223 208 188 165	15 31.1 15 25.9 15 20.8 15 15.7 15 10.8 15 6.1 15 7.8 14 57.9

Phasen des Mondes.

Jan. 6	23 2I.9	Neumond	Juli 3	17 59.8	Neumond
15	4 55.2	Erstes Viertel	10		Erstes Viertel
22	4 33.7	Vollmond	17	9	Vollmond
28	20 27.6	Letztes Viertel	25		Letztes Viertel
Febr. 5	18 15.5	Neumond	Aug. 2	5 5	Neumond
13	21 27.5	Erstes Viertel	Š 8	_ ,	Erstes Viertel
20	14 56.9	Vollmond	16		Vollmond
27	10 9.0	Letztes Viertel	24	-	Letztes Viertel
März 7	13 16.1	Neumond	31	9 31.7	Neumond
15	9 51.6	Erstes Viertel	Sept. 7		Erstes Viertel
22	0 49 8	Vollmond	15		Vollmond
29	1 51.3	Letztes Viertel	23		Letztes Viertel
April 6	6 41.8	Neumond	29	17 50.4	Neumond
13	18 32.8	Erstes Viertel	Okt. 6	14 39.8	Erstes Viertel
20	10 26.3	Vollmond	14	19 0.5	Vollmond
27	19 2.8	Letztes Viertel	22	11 46.6	Letztes Viertel
Mai 5	21 17.9	Neumond	29	3 22.8	Neumond
13	0 38.6	Erstes Viertel	Nov. 5	7 28.0	Erstes Viertel
19	20 11.7	Vollmond	13	12 5.0	Vollmond
27	12 57.3	Letztes Viertel	2,0	20 50.1	Letztes Viertel
Juni 4	8 50.6	Neumond	27	14 34.8	Neumond
11	5 30.9	Erstes Viertel	Dez. 5	3 52.3	Erstes Viertel
18	6 47.3	Vollmond	13	3 53.9	Vollmond
26	6 34.4	Letztes Viertel	20	5 9.2	Letztes Viertel
			27	3 52.3	Neumond

Lm	M	erid	ian	von	Berlin	

Datum und Kulmination	Mittlere Zeit	AR.	Halbe DurchgD. Sternzeit	Bew. in 1 ^h Länge	Dekl.	Bew. in 1 ^h Länge
Dez. 28 0	555 13 18.1 1 44.6 14 9.9 2 34.0 14 57.1 3 19.2 15 40.5	19 15 53.18 19 45 32.14 20 14 3.05 20 41 23.47 21 7 34.84 21 32 41.65 21 56 50.45 22 20 9.20	72.50 71.14 69.67 68.18 66.72 65.36 64.15 63.11	151.01 145.58 139.75 133.89 128.28 123.14 118.62 114.79	-26° 43' 49.5' -25 22 2.1 -23 40 0.3 -21 40 40.9 -19 26 56.4 -17 1 28.7' -14 26 43.5 -11 44 49.8	+353.8 +462.2 +556.1 +635.2 +700.3 +752.6 +793.4 +824.2

I	Apog	ium	
	10	13 ^h	

Jan.	IO	13
Febr.	6	21
März	5	21
April	2	8
April	30	2
Mai	27	21
Juni	24	16
Juli	22	8
Aug.	18	21
Sept.	15	I
Okt.	12	4
Nov.	8	17
Dez.	6	12

Mond

im

Mond im Perigäum

	Mittlere	Mitternacht Berlin.	
Datum	$a_{\mathbb{C}} - a_k$	$\delta_{\alpha} - \delta_{k}$	$\log \sin p_k$
Jan. 14	+ 0.32	+ 36.5 "	8.20696
15	1 + T 8T -0.26	$+21.0_{-18.2}^{-15.5}$	8.21224 +528 8.21224 +634 +106
16	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+ 2.8 \frac{-10.2}{-20.4} - 2.2$	8.21858 + 705 + 71
17	+ 3.49 -0.32 -0.87	$-17.6\frac{-20.4}{-20.2}+0.2$	8.22563 + 731 + 26
18	$+ 3.17 \frac{0.32}{-1.38} -1.06$	$-37.8 \frac{-20.2}{-15.4} + 4.8$	8.23294 + 701 - 30
19	$+1.79 \begin{array}{c} -2.30 \\ -2.30 \end{array}$	-53.2 $+10.4$	8.23995 + 604 - 97
20	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-58.2 + 14.7	8.24599 +412 -161
21	3.44 _2.50 +0.23	$-48.5_{+24.7}^{+15.0}$	1 0.25042 +225
22	$= 5.74_{-1.87} + 0.03$	-23.8 + 35.2 + 10.5	$1 \frac{0.25277}{\pm 2} \frac{-233}{2}$
23	-7.61 $+0.65$	+ 11.4 $+$ 39.5 $+$ 4.3	8.25279
24	- 8.83 +o.47	$+50.9_{+28.2}-1.3$	8.2505012190
25	9.58 +0.28	$+89.1_{+32.8}^{+33.8}-5.4$	8.24043
26	-10.05 -0.09	+121.9 + 25.2 - 7.6	$-6.24094_{-625} - 70$
27	-10.43 -0.29 -0.01	$+147.1_{\pm 16.0} - 8.3$	8.23409 -645 - 20
28	-10.82 -0.48 -0.09	+164.0 + 8.8 - 8.1	$8.22824_{-622} + 23$
29	-11.30 -0.52 -0.05	+172.8 + 0.0 - 7.9	8.22202 - 50 + 53
30	—11.83 °-55	+173.7	8.21633
Febr. 13	+ 3.57 +0.48	- 14.0 _{-18.3}	8.21696 +655
14	+4.05 -0.36 -0.84	$-32.3\frac{-16.3}{-16.7}+1.6$	8 2225T TOSS + 40
15	$+3.69 \begin{array}{r} -0.30 \\ -1.32 \end{array}$	- 40.0 + 6.0	8 22055
16	$+2.37 \begin{array}{c} -2.09 \\ -2.09 \end{array}$	-59.7 + 0.3 + 11.0	$\begin{array}{c} 8.23055 + 711 + 7 \\ 8.23766 + 659 - 52 \\ \end{array}$
17	$+ 0.28 \begin{array}{c} -2.38 \\ -2.38 \end{array}$	-59.4 + 14.1	8.24425 +541 -118
18	$-2.10 \frac{2.30}{-2.21} + 0.17$	-45.0 + 28.2 + 13.8	8.24966 + 360 - 181
19	$-4.31_{-1.08} + 0.43$	-16.8 + 38.3 + 10.1	0.25320 +121 -229
20	-6.09 - 1.35 + 0.43	+21.5 + 42.3 + 4.0	8.25457 -115 -246
21	-7.44 - 1.07 + 0.28	+ 03.8 -+40.5 - 1.8	8.25342 -246 -231
22	- 8.51 _{-0.93} +0.14	+104.3 $+24.7$ -6.4	8.24996 -534 -188
23	9.44 _0.02 0.00	$+138.4_{-2.8} - 9.3$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
24	-10.37	+163.2 + 14.3 - 10.5	8.23800_{-721}^{-59}
25	-11.35 _{-0.08} 0.00	+177.5 + 10 -10.3	$8.23079_{-718} + 3$
2 6	-12.33 -0.87 $+0.11$	+101.5 - 5.0 - 9.0	$8.22301_{-660} + 49$
27	-13.20 +0.32	$+170.5_{-11.9} - 6.9$	$8.21692_{-89} + 82$
28	-13.75	+164.6	8.21105
März 14	+ 3.32 -0.54	- 46.9 -11.4	8.22246
15	$+2.78 \begin{array}{c} -0.54 \\ -1.21 \end{array}$	- 50.3 - 2.8 + 7.0	8.22246 8.22839 +614 + 21
16	$+ 1.57 \frac{-1.21}{-1.64} -0.43$	+ 6.0 + 10.7	8.23453 20
17	- 0.07 -0.09	-55.2 + 10.0 + 12.1	0.2404/ +522 /2
18	$-1.80_{-1.56}^{-1.73} + 0.17$	-36.2 + 19.0 + 11.1	8.24569 +396 -126
19	$= 3.30 _{-1.22} + 0.23$	-6.1 + 30.1 + 8.0	8.24965 +217 -179
20	$-4.09_{-1.18} + 0.15$	+32.0 + 31.5 + 3.4	8.25182 + 2 -215
21	$= 5.87_{-1.14} + 0.04$	$+73.5_{+20.7}$ - 1.8	8.25184 -222 -224
22	-7.01 -0.08	+113.2 +22.2 - 6.4	8.24962203
23	— 8.23 —o.16	$+146.5^{+33.3} - 9.7$	8.24537 -160

Datum	$\alpha_{\alpha} - \alpha_k$	$\delta_{_{\mathbb{C}}}-\delta_{k}$	$\log \sin p_k$
März 23	- 8.23 _{-1.28} -0.16	+146.5 +22.6 - 9.7	8.24537
24	0.01	1 170 1	0 22222
25	17.77	-1818 TIL	8 22268 004 - 25
2 6	-1.40	+ 0.2	8 225 40 -719
27	70 70	- 9.0	8 27852
28	T 4 00	17560	8 27222
29	71.00	1 706 0 19./	8 20606 -527 -
30	-14.20 + 0.87 + 0.74	+130.3 -19.9 - 0.2 +116.4	8.20290 -406 +121
April 13	- 0.40	- 55.2 _{+14.5}	8.23309
14	- I.15	= 40 7 (14.)	8 20740 1434
15	- 257 +017	- 17 I F 23.0 + 7.6	Q 24 T 24 39 0.
16	0.42	T4 T	8 24442 309 - 121
17	- 4.10 -0.77	1 502 30.1	8 2460T
18	1.00	$\pm 870^{-13/1} - 22$	8 2 4 6 6 5 34 - 177
19	= 5.06	1 700 0 1 33.4	8 24527 -130 -170
20	7.21	±1525 29.2 - 06	8 2 1 2 1 6 311 - 150
21	8 78 -1.57	1 1772 T 179.0	8.24210 464 153 8.23752 574 110
22	-1./0	180 T T 0.0	8 22578 3/4 60
	- T2 24 1./0 10.11	+r76 r 3.0 - 0.7	0 22712
23 24		1 160 2 13.3	821000 -042 + 42
25	T40T 100	19.2	8 2 7 2 2 2
26	-T2 68 +0.33 +0.71	±122 7 ± 08	8 20782
27	T2 64 T1.04	1 700 0	8 200000 -40/
28	+1.52	-18.1	8 20006 -19 -172
29	-11.12 + 1.77 + 0.25 -9.35	+68.6	8.19953
Mai 12	- 3.51 _oro	— 15.2 _{—28.0}	8.23692
13	- 4 OT - TO	1 70 8 1 20.0	0 2200, 1192
14	-6-35	+ 44.6 + 31.8 + 3.8 + 44.6 + 1.5	0 - 10 - 1 131
15	- 4 60 -0.33 -0.15	+ 77 0 133.3	1 0 - 1 54
16	T 777 -0.40		8 24027 42 -10
17	T 04 0.//	+138.9 $+28.6$ -3.8 -6.6	0 220
18	1.15	T 160 0 T22.0	8 22672
19	8 62 -1.53	+1728 -107	8 22220 3/3
20	-1./4	1 414	8 227777
21	11.05	-1. T67 6 8a	0
22	-12.98 -1.03 $+0.80$		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
23	0.43	$\begin{array}{c} -10.0 \\ +151.0 \\ -21.0 \\ -31.7 \\ -31.7 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
43 24	10.02	+130.0 - 21.7 - 0.7 + 1.7	
²⁴ 25		1 89 2 20.0	0.20/4/ 267
26	11.39	-1/-3	
27	9.70 1 0 10,10	+71.0 $+56.2$ $+1.7$	0.20129
28	-7.95 + 1.87 + 0.06 -6.08	$\begin{array}{c c} + 56.2 & -14.8 \\ + 43.1 & -13.1 & +1.7 \\ \end{array}$	8.20011 + 19 +13 8.20030
40	0.00	43.1	0.20040

	Mittlere 1	Mitternacht Berlin	
Datum	$\alpha_{_{\mathbb{C}}}-\alpha_{k}$	$\delta_{arphi} = \delta_k$	$\log \sin p_k$
Juni 11 12 13	- 5.70	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8.23828 -140 8.23688 -195 - 55 8.23493 -240 - 54
14 15	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} +137.0 \\ +158.3 \\ +171.4 \\ +4.1 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
16 17 18	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	+175.5 - 5.4 -9.5 + 170.1 -14.0 -8.6	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
19	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
21 22	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} +93.0 \\ -19.1 \\ +73.9 \\ -16.3 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
23 24 25	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} +57.6 \\ +43.7 \\ -12.3 \\ \end{array}$	$\begin{array}{c} 8.20063 - 82 + 118 \\ 8.19981 + 49 + 131 \\ 8.20023 + 49 + 147 \end{array}$
26	- 2.78	+ 19.6	8.20215
Juli 10 11 12	$ \begin{array}{c ccccc} & -7.45 & -0.61 \\ & -8.06 & -0.89 & -0.28 \\ & -8.95 & -1.15 & -0.26 \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 8.23571 \\ 8.23192 \\ -397 \\ 8.22795 \\ -400 \\ \end{array} - 18$
1 3 14	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$+179.8 \begin{array}{r} +3.5 \\ -5.4 \\ +174.4 \\ -12.5 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
15 16 17	-12.38 +0.51 -12.91 +0.15 +0.68	+160.9 -19.3 -19.3 -22.2 -119.4 -22.2 -0.1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
18	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+119.4 - 22.3	$\begin{array}{c} 8.20881 & + 30 \\ 8.20556 & -325 \\ 8.20278 & -278 \\ -215 & + 63 \end{array}$
20 21 22	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} + 58.7 \\ + 43.5 \\ -13.1 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
23 24	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 8.19890 \\ 8.19967 \\ +202 \\ 8.20169 \\ +229 \\ \end{array}$
25 2 6	$\begin{array}{c} + 0.14 + 1.05 \\ + 1.46 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8.20109 +331 +129 8.20500 +454 +123 8.20954
Aug. 9	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	+187.7 - 6.1 - 8.4	$\begin{array}{c} 8.22604 \\ 8.22081 \\ -482 \end{array} + 41$
11 12 13	-13.53 -0.50 +0.52 -14.03 +0.19 +0.69	+107.1 $+146.8$ -20.3 -3.0 -122.5	$\begin{array}{c} 8.21599 \\ 8.21169 \\ -374 \\ +57 \end{array}$
14 15	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+100.1 \begin{array}{r} -23.4 \\ -21.7 \\ +78.4 \\ -10.2 \end{array} + 1.7$	$\begin{array}{ccc} 8.20478 & 317 & + 56 \\ 8.20217 & -204 & + 57 \end{array}$
16 17	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} +59.2 \\ +42.7 \end{array} - \begin{array}{c} 16.5 \\ +2.3 \end{array}$	$\begin{array}{c} 8.20013 \\ 8.19874 \end{array} - \begin{array}{c} 2.04 \\ -139 \\ +69 \end{array}$

	Mittlere	Mitternacht Berlin	•
Datum	$\alpha_{\alpha} = \alpha_k$	$\delta_{\alpha} = \delta_k$	$\log \sin p_k$
Aug. 17	- 8.14 + 1.91 + 0.07	+ 42.7 -14.2 +2.3	8.19874 - 70 + 69
18 19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	+28.5 -12.4 +1.8 +1.0	8.19804 + 11 + 81 8.19815 + 94
20	2 16 -000	11.4	& TOOSO TIOS
21	060 +1.77	- 6.2 -10.9	8 20120 +209
22	+ 0.90 + 1.59 - 0.27	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8.20451 +112
23	+ 2.22 + 0.87 - 0.45	- 29.0 -11.9 -0.2	8.20886 +435 +109
24	+ 3.09	- 40.9 - Ti.9	8.21430
Sept. 7	=14.64 _{-0.73}	+175.2	8.22016576
8	-15.37 + 0.07 + 0.80	$+153.3 \begin{array}{c} 21.9 \\ -25.2 \end{array} = 3.3$	$8.21440 \frac{376}{-495} + 81$
9	-15.30 _{+0.82} +0.75	+128.1 -25.3 -0.1	8.20945 + 90
10	-14.48 + 1.39 + 0.57	$+102.8_{-23.3}^{-23.3} +2.0$	8.20540 -212 + 92
11	-13.09 _{+1.72} +0.34	$+79.5_{-20.4}^{-3.5}$ +2.9	$8.20227_{-228} + 85$
12	-11.30 _{+1.89} +0.16	$+59.1_{-17.5}^{+2.9}$	8.19999 - 149 + 79
13	- 9.47 _{+1.94} +0.05	+ 41.6 -15.1 +2.4	8.19850 _ 72 + 77
14	$-7.53_{+1.02}^{+0.02}$	$+$ 20.5 $_{-13.2}$ $^{+1.9}$	$8.19778 - \frac{7}{3} + 69$
15	$-5.01_{+1.85}^{-0.07}$	$+$ 13.3 $_{-11.8}$ $+$ 1.4	8.19775 + 68 + 71
16	-3.76 + 1.76 - 0.09	+ 1.5 -11.0 +0.8	8.19843 + 140 + 72
17	-2.00 + 1.61 - 0.15	- 9.5 _{-10.6} +0.4	8.19983 +219 + 79
18	$-0.39_{+1.40}^{+1.40}$	- 20.I -10.5 +0·I	8.20202 + 305 + 86
19	+ 1.01 +1.09 -0.31	- 30.6 _{-10.3} +0.2	8.20507 +394 + 89
20	+ 2.10 +0.65	- 40.9 - 9.4 +o.9	8.20901 +483 + 89
21	+ 2.75 +0.10 -0.55	-50.3 - 6.9 + 2.5	8.21384 + 568 + 85
22	+ 2.85 -0.47 -0.57	$-57.2_{-2.0} + 4.9$	8.21952 + 633 + 65
23	+ 2.38	- 59.2	8.22585
Okt. 7	-15.72 _{+1.27}	+107.2	8.20924446
8	-14.45 +1.71 +0.44	$+81.5_{-22.2}^{23.7}+3.5$	8.20478 +118
9	-12.74 + 1.93 + 0.22	$+59.3_{-18.7} + 3.5$	$8.20150 \begin{array}{r} 320 \\ -216 \end{array} + 112$
10	-10.81 + 1.99 + 0.06	$+40.6_{-15.7}^{-15.7} +3.0$	8.19934 +107
II	- 8.82 -0.04	$+24.9_{-13.6}^{-13.6} +2.1$	8.19825 - 15 + 94
12	-6.87 + 1.85 - 0.10	+ 11.3 -12.1 +1.5	8.19810 + 65 + 80
13	$-5.02_{+1.71}^{+1.71}$	- 0.8 +0.9	8.19875 + 137 + 72
14	= 3.31 + 1.55 - 0.16	- 12.0 -10.6 +0.6	8.20012 + 196 + 59
15	$-1.70_{+1.33}$ -0.22	$-22.6_{-10.1}^{-10.1} + 0.5$	8.20208 + 57
16	- 0.43 +1.04 -0.29	$-32.7_{-9.4}^{-9.4}$ +0.7	8.20461 + 305 + 52
17	+ 0.61 + 0.68 - 0.36	-42.1 - 8.1 + 1.3	8.20/00 + 52
18	+ 1.29 + 0.26 - 0.42	-50.2 -5.5 $+2.6$	8.21123 + 12 + 56
19	+ 1.55 -0.14 -0.40	$-55.7_{-1.2}^{+4.3}$	$8.21530_{+464} + 51$
20	$+1.41_{-0.43}^{-0.29}$	-56.9 + 4.7 + 5.9	8.22000 +511 + 47
21	+ 0.98 -0.15	$-52.2_{+12.1}^{+7.4}$	$8.22511_{+541} + 30$
22	+ 0.40	- 40.1	8.23052

Mittlere Mitternacht Berlin.							
Datum	$\alpha_{\alpha} = \alpha_k$	$\delta_{\sigma} - \delta_{k}$	$\log \sin p_k$				
Nov. 5	-13.62 s	+ 61.9	8.20538				
6	-11.78 +1.08 +0.14	$+41.2_{-16.0} +3.8$	8.20191213 +134				
7	- 9.80 to 0.00	$+24.3_{-14.1}^{-14.1} +2.8$	8.19978 _ 8. +129				
8	- 7.82 +1.89 -0.09	+ 10.2 +2.0	8.19894 + 33 +117				
9	= 5.93 + 1.73 - 0.16	$-1.9_{-10.9} +1.2$	8.19927 +125 +102				
10	-4.20	$=$ 12.8 $^{+0.5}$	8.20002 + 82				
II	- 2.00 _{+1.28} -0.26	$=23.2_{-9.9}^{+0.5}$	$8.20279_{-+280} + 63$				
12	$-1.38_{+0.94}$ -0.34	$-33.1_{-9.3}^{+0.6}$	$8.20559_{+223} + 43$				
13	- 0.44 +0.55 -0.39	-42.4 - 7.7 + 1.6	8.20882 + 248 + 25				
14	+ 0.11 +0.12 -0.43	-50.1 - 4.6 + 3.1	0.41430 +265 T 1/				
15	$+ 0.23 _{-0.23} -0.35$	= 54.7 - 0.1 + 4.5	8.21595 + 272 + 7				
16	0.00 -0.43 -0.20	= 54.8 + 6.1	8.21967 + 3				
17	- 0.43 -0.45 -0.02	-48.8 + 12.7 + 6.7	8.22342 +375				
18	- 0.88 -0.34 +0.11	= 36.1 + 19.1 + 6.4	8.22717 + 373 - 2				
19	- I.22 +0.12	-17.0 + 24.8 + 5.7	8.23090 +360 - 13				
20	- I.44 -0.16 +0.06	+ 7.8 +29.4 +4.6	9 22450				
21	- 1.60	+ 37.2	$\begin{array}{c} 8.23450 \\ 8.23783 \end{array} + 333 = 27$				
Dez. 5	$=8.34_{+1.92}$	+ 10.612.5	8.20040 — 69				
6	- 6.42 +1.81 -0.11	$-1.9^{-12.5}_{-10.7} + 1.8$	$8.19971 + \frac{69}{68} + 137$				
7	$-4.61 \begin{array}{c} +1.61 \\ +1.64 \end{array}$	_ T26	8 20020 - 4122				
8	- 2.07	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8 20220 7191				
9	T 50 -005	9.4	8 20520 7299 1 50				
10	- 0.56 71.03	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8 20007 5/0 + 40				
11	+ 002 -052	1877 - 0.0	8 27 224 + 18				
12	+ 0.08 +0.00	- 5.4	8 21770 1443 - 0				
13	-0.42	547 16-	8 222TF 1730 = 27				
14	- TO6 -0.72	186	8 22674 +399 - 77				
15	- T &T -0.75	247 13.9	8 22062 +340 - 62				
16	-0.58	TOP	8 22248 - 60				
17	2 == 2.3*	1 T26 T20.3 +26	8 00 4 7 4 6				
18	0.13	+29.9	2 22622				
19	-0.07	1 700	Q COHET				
20	7.08 -0.17	1 1240	8 22811 - 55				
21	$\begin{array}{c c} -3.08 & -0.43 \\ -3.51 & -0.43 \end{array}$	+133.7	8.23818 + 7				

12 ^h	_		en Erdäquato	1
Mittl. Zeit	i	Δ	Ω'	Δ −88
Jan 4	21 56.02	188° 27.93	359 25.94 225	0 31.43 2.0
6	21 55.90 0.11	187 54.00	359 2 8.19 2.2 5	0 29.35
16	21 55.79 0.10	187 20.24 33.85	359 30.45 2.26	0 27.27
26	21 55.69 0.10	186 46.39 33.86	359 32.71 2.26	0 25.18
Febr. 5	21 55.59		359 34.97	0 23.09
15	21 55.50	185 38.67 33.86	359 37.24	0 21.00
25	27 55 42	18c 480 3350	250 20 51	O T8.00
März 7	21 55 26	T84 20 02 33.0/	250 41 78	0 16.81
17	21 55.20	182 57 05 33.00	250 44.06	0 14.71
27	21 55.25	183 23.17	359 46.33	0 12.61
April 6	0.05	33.87	359 48.61	2.
April 6	21 55.20 0.04 21 55.16	182 49.30 182 15.42 33.88	250 50 88	0 10.51 2.
2 6	21 55.12 0.04	T8T 4TEE 33.07	250 52 16	0 6.31
Mai 6	21 55 00	181 768 33.67	250 55 44	0 4.20
16	21 55.08 0.01	180 33.81	359 57.72	0 2.10
	0.01	33.87	2.20	2.
2 6	2I 55.07 _{0.00}	179 59.94 33.87	0 0.00	359 59.99 2.
Juni 5	21 55.07 0.01	179 20.07 22.87	0 2.28	359 57.89 2.
15	21 55.08 0.02	170 52.20 33.87	0 4.56 2.28	359 55.79 2.
Juli 5	21 55.10 0.03	178 18.33 33.87	0 6.84 2.28	359 53.69 2.
-	21 55.13	177 44.46	0 9.12	359 51.58
15	21 55·17 _{0.05}	177 10.60	O 11.40 2.28	359 49.48 2.
25	21 55.22 0.06	170 30.73 33.86	0 13.68	359 47.38 2.
Aug. 4	21 55.28 0.07	170 2.87	0 15.95 2.27	359 45.28 2.
14	21 55.35 _{0.07}	175 29.00 33.87	0 18.22	359 43.18 2.
2 4	21 55.42	174 55.13	0 20.49	359 41.09
Sept. 3	21 55.50 _{0.10}	174 21.26 33.86	0 22.76	359 38.99 2.
13	21 55.60 0.10	173 47.40 33.87	0 25.03 2.27	359 36.90 2.
23	21 55.70 0.10	173 13.53 33.86	0 27.30 2.26	359 34.81
Okt. 3	21 55.80 _{0.11}	172 39.07	0 29.56	359 32.73 2
13	21 55.91	172 5.81 33.86	0 31.82	359 30.65
23	2.7 56.02	171 2105	0.24.07	250 28 57
Nov. 2	21 56.16 0.13	170 58 10 33.05	0 26.22	250 26 40
12	2T 50 20	170 24.25 33.85	0 38.57 2.25	250 24 42
22	21 56 42	100 50 41 33.04	0 40.81	359 22.35
Dez. 2	21 56.58	169 16.59 33.82	0 43.05	359 20.28
12	21 56 74	168 42.77 33.82	0 45.28	250 18 22
22	27 76 07	T68 8 07 33.02	0 47 51	250 16.16
32	21 50.91 _{0.18}	167 35.13	0 49.74	359 14.11

12 ^h Mittl. Zeit	Aufst. Knoten der Mondbahn	Mittlere Länge des Mondes	Bew	egung der m nach mit		0		Mondes
Jan. – 4	7° 56′ 32.5	145° 22' 16.4	d I	13 10 35.0	m I	0 32.9	т 3I	17 1.2
6	7 24 46.1	277 8 6.7	2	26 21 10.1	2	I 5.9	32	17 34.1
16	6 52 59.8	48 53 57.0	3	39 31 45.1	3	1 38.8	33	18 7.1
26	6 21 13.4	180 39 47.3	4	52 42 20.1	4	2 11.8	34	18 40.0
Febr. 5	5 49 27.1	312 25 37.6	5	65 52 55.1	5	2 44.7	35	19 12.9
15	5 17 40.7	84 11 27.9	6	79 3 30.2	6	3 17.6	36	19 45.9
25	4 45 54.4	215 57 18.2	7	92 14 5.2	7	3 50.6	37	20 18.8
März 7	4 14 8.1	347 43 8.5	8	105 24 40.2	8	4 23.5	38	20 51.8
17	3 42 21.7	119 28 58.8	9	118 35 15.2	9	4 56.5	39	21 24.7
27	3 10 35.4	251 14 49.1	IO	131 45 50.3	10	5 29.4	40	21 57.7
April 6	2 38 49.0	23 0 39.4			11	6 2.4	41	22 30.6
16	2 7 2.7	154 46 29.7			12	6 35.3	42	23 3.5
26	1 35 16.3	286 32 19.9	ь		13	7 8.2	43	23 36.5
Mai 6	1 3 30.0	58 18 10.2	I I	0 32 56.5	14	7 41.2	44	24 9.4
16	0 31 43.6	190 4 0.5	2	1 5 52.9	15	8 14.1	45	24 42.3
2 6	359 59 57-3	321 49 50.8	3	1 38 49.4	16	8 47.1	46	25 15.3
Juni 5	359 28 11.0	93 35 41.1	4	2 11 45.8	17	9 20.0	47	25 48.2
15	358 56 24.6	225 21 31.4	5	2 44 42.3	18	9 52.9	48	26 21.2
25	358 24 38.3	357 7 21.7	6	3 17 38.8	19	10 25.9	49	2 6 54.1
Juli 5	357 52 51.9	128 53 12.0	7		20	10 58.8	50	27 27.1
15	357 21 5.6	260 39 2.3	7 8	3 50 35.2 4 23 31.7	21	11 31.8	51	28 0.0
25	356 49 19.2	32 24 52.6	9	4 56 28.1	22	12 4.7	52	28 32.9
Aug. 4	356 17 32.9	164 10 42.9	9		23	12 37.6	53	29 5.9
14	355 45 46.5	295 56 33.2	IO	5 29 24.6	24	13 10.6	54	29 38.8
24	355 14 0.2	67 42 23.5	11	6 2 21.1	25	13 43.5	55	30 11.7
Sept. 3	354 42 13.9	199 28 13.8	14		26	14 16.5	56	30 44.7
13	354 10 27.5	331 14 4.1	13	7 8 14.0	27	14 49.4	57	31 17.6
23	353 38 41.2	102 59 54.4	14	7 41 10.4	28	15 22.3	58	31 50.6
Okt. 3	353 6 54.8	234 45 44.7	15	8 14 6.9	29	15 55.3	59	32 23.5
13	352 35 8.5	6 31 34.9	16	8 47 3.4	30	16 28.2	60	32 56.5
23	352 3 22.1	138 17 25.2	17	9 19 59.8			!	
Nov. 2	351 31 35.8	270 3 15.5	18	9 52 56.3		1 4		
12	350 59 49.5	41 49 5.8	19	10 25 52.7		10	- 5	 -5
22	350 28 3.1	173 34 56.1	20	10 58 49.2		20	11	.0
Dez. 2	349 56 16.8	305 20 46.4	21	11 31 45.6		30	16	-5
12	349 24 30.4	77 6 36.7	22	12 4 42.1		40	2.2	.0
22	348 52 44.1	208 52 27.0	23	12 37 38.5		50	27	.5
32	348 20 57.7	340 38 17.3	24	13 10 35.0		60	32	.9

Meridian	nnd	Polhöhe	von Berlin.
meridian	u = u	T OTHORE	AOU DEITIU

Datu	ıın	SON	NE	М()ND	Datum	SON	NE	мо	ND
		Unterg.	Aufg.	Aufg.	Unterg.		Unterg.	Aufg.	Unterg.	Aufg.
Jan.	0	3 53 m	20 14	13 52	23 53 m	Febr. 5	4 51 m	19 37	3 43	20 I3
	I	3 54	20 13	15 16	-5 55	6	4 52	19 35	4 59	20 25
		J J.		, I		7	4 54	19 33	6 12	20 35
				Unterg.	Aufg.	8	4 56	19 31	7 24	20 43
	2	3 55	20 13	0 7	16 39	9	4 58	19 29	8 35	20 52
	3	3 56	20 13	0 26	18 1	10	5 0	19 27	9 47	2I I
	4	3 57	20 13	0 52	19 15	II	5 2	19 26	II I	21 10
	5	3 58	20 12	I 29	20 15	12	5 4	19 24	12 17	21 23
	6	4 0	20 12	2 21	20 59	13	5 6	19 22	13 37	21 41
	7 8	4 1	20 11	3 27	21 29	14	5 8	19 20	15 O	22 8
		4 2	20 II 20 IO	5 56	21 50	15 16	5 10	19 18	16 19 17 27	22 49 23 51
	9	4 4 4	20 10	7 11	22 5	17	5 14	19 14	18 17	~5 5x
	II	4 7	20 9	8 24	22 26	-/) -4	-7 -4	10 1/	
	12	4 8	20 8	9 35	22 35				Aufg.	Unterg.
	13	4 10	20 7	10 46	22 43	18	5 16	19 12	1 14	18 50
	14	4 11	20 7	11 59	22 53	19	5 17	19 10	2 49	19 13
	15	4 13	20 6	13 14	23 4	20	5 19	19 7	4 28	19 30
	16	4 14	20 5	14 34	23 19	21	5 21	19 5	6 5	19 43
	17	4 16	20 4	15 59	23 41	22	5 23	19 3	7 39	19 54
	18	4 18	20 3	17 23	-	23	5 25	19 1	9 10	20 5
				A 6	Linkova	24	5 27	18 59	10 40	20 18
				Aufg.	Unterg.	25	5 29	18 57	12 8	20 34
	19	4 19	20 2	0 15	18 41	26	5 30	18 55	13 35	20 55
	20	4 21	20 0	1 7	19 42	27 28	5 32	18 52	14 57 16 6	21 25
	2I 22	4 23	19 59 19 58	2 22	20 25	März 1	5 34 5 36	18 50	17 0	22 9 23 7
	23	4 2 5 4 2 7	19 57	3 54 5 33	21 11	2	5 38	18 46	17 38	45 /
	24	4 28	19 55	7 10	21 25	-	J 3°	10 40	1/ 30	
	25	4 30	19 54	8 42	21 37				Unterg.	Aufg.
	26	4 32	19 53	10 11	21 48	3	5 40	18 43	0 16	18 3
	27	4 34	19 51	11 37	22 0	4	5 42	18 41	1 31	18 21
	28	4 36	19 50	13 3	22 13	5	5 43	18 39	2 46	18 34
	29	4 37	19 48	14 28	22 30	6	5 45	18 36	4 0	18 44
	30	4 39	19 47	15 51	22 54	7	5 47	18 34	5 13	18 53
13.1	31	4 41	19 45	17 7	23 27	8	5 49	18 32	6 25	19 1
Febr	I	4 43	19 43	18 11	-	9	5 51	18 30	7 37	19 10
				Untorc	Aufo	10	5 53	18 27	8 49	19 19
	•		** **	Unterg.	Autg.	11	5 54	18 25	10 5	19 31
	2	4 45	19 42	0 14	19 0	12	5 56	18 23	11 24	19 46
	3	4 47	19 40	1 16	19 33	13	5 58 6 0	18 20	12 45	20 9
	4	4 49	19 38	2 20	19 56	14	0 0	10 10	14 5	20 43

Meridian und	Polhöhe	von Berlin.
--------------	---------	-------------

Datum	SOI	NNE	MOI	ND	Datum	SON	NE	MOND	
	Unterg.	Aufg.	Unterg.	Aufg.		Unterg.	Aufg.	Aufg. Unterg	
März 15	6 r	18 ^h 16	15 15	21 34	April 20	7 4 m	16 ^h 53 ^m	7 i 16 41	
16	6 3	18 13	16 10	22 46	21	7 6	16 51	8 33 16 58	
17	6 5	18 11	16 49		22	7 8	16 48	10 4 17 21	
					23	7 9	16 46	11 30 17 54	
			Aufg.	Unterg.	24	7 11	16 44	12 41 18 43	
18	6 7	18 9	0 14	17 15	25	7 13	16 42	13 33 19 46	
19	6 9	18 6	1 49	17 33	26	7 15	16 40	14 9 21 0	
20	6 1 0	18 4	3 25	17 47	27	7 16	16 38	14 33 22 16	
21	6 12	18 1	5 0	17 59	28	7 18	16 36	14 49 23 32	
22	6 14	17 59	6 32	18 11	29	7 20	16 34	15 1 —	
23	6 16	17 57	8 4	18 22				Unterg. Aufg.	
24 25	6 17	17 54	9 36	18 37 18 56	20	7 22	16.00	0 46 15 11	
26	6 19	17 52	12 35		Mai 1	'	16 32 16 30	1 58 15 20	
27	6 23	17 47	13 53	19 23	2	7 23	16 28	3 10 15 28	
28	6 24	17 45	14 55	20 55	3	7 27	16 26	4 22 15 37	
29	6 26	17 43	15 39	22 2	4	7 28	16 24	5 37 15 48	
30	6 28	17 40	16 8	23 17	5	7 30	16 22	6 55 16 1	
31	6 30	17 38	16 28		6	7 32	16 21	8 16 16 19	
					7	7 33	16 19	9 39 16 46	
			Unterg.	Aufg.	8	7 35	16 17	10 57 17 27	
April 1	6 31	17 36	0 33	16 42	9	7 37	16 15	12 2 18 26	
2	6 33	17 33	1 48	16 53	10	7 38	16 13	12 49 19 42	
3	6 35	17 31	3 1	17 3	11	7 40	16 12	13 22 21 9	
4	6 37	17 29	4 13	17 11	12	7 41	16 10	13 44 22 40	
5	6 38	17 26	5 25	17 19	13	7 43	16 9	14 0 -	
7	6 40	17 24 17 22	6 38	17 28				Aufg. Unterg	
8	6 42	17 22	7 53 9 12	17 39 17 54	14	7 45	16 7	0 9 14 13	
9	6 45	17 17	IO 33	18 14	15	7 46	16 5	I 37 14 24	
10	6 47	17 15	11 53	18 44	16	7 48	16 4	3 4 14 35	
II	6 49	17 13	13 7	19 29	17	7 49	16 3	4 33 14 47	
12	6 50	17 10	14 7	20 33	18	7 51	16 I	6 3 15 2	
13	6 52	17 8	14 49	21 54	19	7 52	16 o	7 33 15 21	
14	6 54	17 6	15 18	23 24	20	7 54	15 58	9 2 15 50	
15	6 56	17 4	15 38		21	7 55	15 57	10 20 16 32	
					22	7 57	15 56	11 22 17 29	
			Aufg.	Unterg.	23	7 58	15 54	12 6 18 40	
16	6 57	17 1	0 56	15 53	24	7 59	15 53	12 34 19 57	
17	6 59	16 59	2 28	16 5	25	8 1	15 52	12 54 21 15	
18	7 1	16 57	3 59	16 17	26	8 2	15 51	13 8 22 30	
19	7 3	16 55	5 30	16 28	27	8 4	15 50	13 18 23 43	

			Meric	lian u	nd Po	lhöhe v	on Ber	lin.		
Dat	um	SON	INE	МО	ND	Datum	SON	NE	МО	ND
		Unterg.	Aufg.	Aufg.	Unterg.		Unterg.	Aufg.	Unterg.	Aufg.
Mai	28	8 ^h 5 ^m	15 49 m	13 27	h m	Juli 2	8 23 m	15 44 m	7 33	I4 I
				Untorus	Anfor	3	8 23	15 45	8 36	15 7
	29	8 6	77 40	Unterg.	Aufg.	4	8 22	15 46	9 21	16 31
	30	8 7	15 48	0 54 2 5	13 36	5 6	8 21	15 47 15 48	9 52	19 38
	31	8 9	15 46	3 18	13 54	7	8 21	15 49	10 27	21 10
Juni	1	8 10	15 45	4 35	14 6	8	8 20	15 50	10 40	22 38
	2	8 m	15 44	5 55	14 23	9	8 20	15 51	10 51	
	3	8 12	15 43	7 18	14 47					
	4	8 13	15 43	8 40	15 22				Aufg.	Unterg.
	5	8 14	15 42	9 51	16 15	10	8 19	15 52	0 4	II 2
	6	8 15	15 42	10 46	17 28	11	8 18	15 53	1 31	11 14
	7	8 16	15 41	11 24	18 55	12	8 17	15 54	2 58	11 29
	8	8 17	15 41	11 49	20 26	13	8 16 8 15	15 55	4 25	11 51
	9	8 18	15 40 15 40	12 7 12 20	21 56 23 24	14	8 15	15 56 15 58	5 48	13 7
	II	8 19	15 39	12 32	25 24 —	16	8 13	15 59	7 56	14 8
		0 19	-5 59	-4 54		17	8 12	16 0	8 35	15 21
				Aufg.	Unterg.	18	8 11	16 і	9 1	16 39
	12	8 20	15 39	0 51	12 43	19	8 10	16 3	9 19	17 56
	13	8 21	15 39	2 16	12 54	20	8 9	16 4	9 32	19 11
	14	8 21	15 39	3 43	13 7	21	8 7	16 6	9 42	20 24
	15	8 22	15 39	5 12	13 24	22	8 6	16 7	9 5T	21 35
	16	8 22	15 39	6 39	13 49	23	8 5	16 8	9 59	22 45
	17	8 23	15 39	8 1	14 25	24	8 3 8 2	16 10	10 8	23 57
	18	8 2 3	15 39	9 10	15 16 16 22	25	8 2	16 11	10 18	_
	19 20	8 23 8 24	15 39	10 0	17 38				Unterg.	Aufg.
	21	8 24	15 39	10 57	18 56	26	8 0	16 13	I I2	10 30
	22	8 24	15 39	11 13	20 13	27	7 59	16 14	2 31	10 46
	23	8 24	15 40	11 25	21 27	28	7 57	16 16	3 52	11 10
	24	8 24	15 40	11 35	22 38	29	7 56	16 17	5 11	11 47
	25	8 24	15 40	11 43	23 49	30	7 54	16 19	6 20	12 43
	26	8 24	15 41	11 52	_	3 r	7 53	16 20	7 14	14 0
				**		Aug. 1	7 51	16 22	7 5 r	15 31
				Unterg.	-	2	7 49	16 23	8 15	17 8
	27	8 24	15 41	1 0	12 1	3	7 47	16 25	8 32	18 44
	28	8 2 4	15 42	2 14	12 12	4	7 46	16 27	8 46	20 16
	29	8 24 8 24	15 42	3 32	12 26	5 6	7 44	16 2 8 16 3 0	8 57 9 8	21 46
Juli	30	8 24	15 43	4 54 6 1 6	12 46 13 15	7	7 42	16 30	9 8	23 15
Juli		~ ~4	-) 44	0 10	17 17	/	1 / 40	10 31	7 40	

Meridian und Polhöhe von Berlin.

Datur	n	SON	NE	MO	ND	Datum	SON	INE	MOI	ND
		Unterg.	Aufg.	Aufg.	Unterg.		Unterg.	Aufg.	Aufg.	Unterg.
Aug.	8	7 38 m	16 33 m	h m	9 35	Sept. 15	6 ^h 15 ^m	17 36	6 ^h 18 ^m	18 ^h 23 ^m
O	9	7 36	16 35	2 12	9 55	16	6 13	17 38	6 26	19 34
1	ro l	7 35	16 36	3 38	10 23	17	6 10	17 40	6 34	20 46
]	ΙI	7 33	16 38	4 54	11 3	18	6 8	17 41	6 44	22 I
1	12	7 31	16 39	5 54	11 59	19	6 5	17 43	6 57	23 18
	13	7 29	16 41	6 37	13 8	20	6 3	17 45	7 14	-
	14	7 27	16 43	7 6	14 24					
	15	7 25	16 45	7 26	15 42				Unterg.	Aufg.
:	16	7 23	16 46	7 40	16 58	21		17 46	0 36	7 40
	17	7 21	16 48	7 51	18 11	2.2	5 58	17 48	1 50	8 18
	18	7 19	16 50	8 0	19 23	23	5 56	17 50	2 54	9 14
	19	7 16	16 51	8 8	20 33	24	5 5 .	17 51	3 42	10 28
	20	7 14	16 53	8 16	21 44	25		17 53	4 15	11 55
	21	7 12	16 55	8 25	22 57	26	7 .7	17 55	4 39	13 29
3	22	7 10	16 56	8 36	-	27		17 57	4 56	15 3
				Unterg.	Aufg.	28		17 58	5 9	16 37
		. 0	-6 -0		_	29	, ,	18 0	5 21	18 11
	23	7 8	16 58	0 13	8 50	30		18 2	5 32	19 45
	24	7 6	17 0	1 32	9 10	Okt. 1	2 21	18 3	5 45 6 I	21 20
	2 5 2 6	7 3 7 I	17 I 17 3	2 51	9 40 10 2 6	2)))	18 5	6 I 6 24	22 55
	27	6 59		4 4	11 31	3	5 32	10 /	0 24	
	28	6 57	17 5	5 3 5 46	12 55				Aufg.	Unterg.
	29	6 55	17 8	6 16	14 29	4	5 30	18 8	0 24	6 56
	30	6 52	17 10	6 36	16 6	5	3 -	18 10	I 40	7 43
	3 I	6 50	17 11	6 51	17 42	i		18 12	2 36	8 45
Sept.	I	6 48	17 13	7 3	19 16	7))	18 14	3 14	9 59
•	2	6 45	17 15	7 15	20 48	8		18 15	3 39	11 17
	3	6 43	17 16	7 27	22 21	g	0	18 17	3 56	12 34
	4	6 41	17 18	7 40	23 53	IC		18 19	4 9	13 48
	5	6 39	17 19	7 58	-	11	5 14	18 21	4 19	15 I
						12	5 12	18 23	4 27	16 12
				Aufg.	Unterg.	13	5 9	18 24	4 35	17 22
	6	6 36	17 21	1 23	8 23	14	5 7	18 26	4 44	18 34
	7	6 34	17 23	2 44	9 0	15	_	18 28	4 54	19 49
	8	6 32	17 25	3 51	9 51	16	5 3	18 30	5 6	21 6
	9	6 29	17 26	4 39	10 57	17		18 32	5 22	22 24
	10	6 27	17 28	5 11	12 12	18		18 33	5 45	23 40
	II	6 24	17 30	5 33	13 30	19	4 56	18 35	6 18	-
	12	6 22	17 31	5 48	14 46	10.10			Unterg.	Aufor
	13	6 20	17 33	6 0	16 0	1151		-0		
	14	6 17	17 35	6 9	17 12	20	4 54	18 37	0 47	7 7

Meridian und Polhöhe von

Dati	um	SON	NE	мо	ND	Datu	n	SON	NE	MOND		
		Unterg.	Aufg.	Unterg.	Aufg.			Unterg.	Aufg.	Unterg.	Aufg.	
Okt.	21	h m 4 52	18 ^h 39 ^m	1 39 m	8 14	Nov.	2 6	3 52 m	h m 19 44	1 m 2 25	19 16 m	
	22	4 50	18 41	2 20	9 35		27	3 51	19 45	2, 48	20 46	
	23	4 48	18 42	2 42	11 3		28	3 50	19 47	3 22	22 3	
	24	4 46	18 44	3 0	12 34		29	3 50	19 48	4 12	23 I	
	25	4 44	18 46	3 14	14 4		30	3 49	19 50	5 19	23 39	
	26	4 41	18 48	3 26	15 35	Dez.	1	3 48	19 51	6 37	-	
	27	4 39	18 50	3 38	17 7							
	28	4 37	18 51	3 50	18 41					Aufg.	Unterg	
	29	4 35	18 53	4 4	20 17		2	3 47	19 52	0 4	7 58	
	30	4 33	18 55	4 23	21 51		3	3 47	19 54	0 21	9 17	
	31	4 31	18 57	4 51	23 17		4	3 46	19 55	0 33	10 32	
Nov.	1	4 30	18 59	5 32	-		5	3 46	19 57	0 43	11 44	
			,		ET.		6	3 45	19 58	0 52	12 54	
				Aufg.	Unterg.		7	3 45	19 59	1 0	14 5	
	2	4 28	19 1	0 24	6 29		8	3 44	20 0	1 10	15 17	
	3	4 26	19 3	1 11	7 41		9	3 44	20 1	I 20	16 33	
	4	4 24	19 5	1 41	9 0		IO	3 44	20 3	I 33	17 51	
	5	4 22	19 6	2 2	10 19		II	3 44	20 4	1 52	19 10	
	6	4 20	19 8	2 16	11 35		12	3 44	20 5	2 18	20 25	
	7	4 19	19 10	2 27	12 48	1	13	3 44	20 6	2 58	21 28	
	8	4 17	19 12	2 36	13 59		14	3 44	20 7	3 56	22 16	
	9	4 15	19 14	2 45	15 9		15	3 44	20 7	5 10	22 48	
	10	4 14	19 16	2 53	16 21		16	3 44	20 8	6 35	23 11	
	II	4 12	19 17	3 2	17 35		17	3 44	20 9	8 4	23 28	
	12	4 10	19 19	3 14	18 51		18	3 44	20 10	9 32	23 40	
	13	4 9	19 21	3 28	20 10		19	3 44	20 10	10 59	23 52	
	14	4 7	19 23	3 49	21 28		20	3 45	20 11	12 25	_	
	15 16		19 25 19 2 6	4 20	22 39					Unterg.	Aufg.	
		4 4	_	5 4 6 7	23 36		21	2 45	20 11		_	
	17	4 3	19 28	6 7			2I 22	3 45 3 46	20 12	0 3	13 51	
				Unterg.	Aufg.		23		20 12	0 29	16 51	
	18	4 2	19 30	0 17	7 24		24	3 46	20 12	0 48	18 21	
	19	4 0	19 32	0 46	8 49		25	3 47	20 13	1 17	19 43	
	20	3 59	19 34	1 6	10 17		26	3 48	20 13	1 59	20 48	
	21	3 58	19 35	1 21	11 45		27	3 49	20 13	2 58	21 34	
	22	3 57	19 37	1 33	13 12		28	3 50	20 14	4 13	22 4	
	23	3 55	19 37	I 44	14 39		29	3 51	20 14	5 34	22 24	
	24	3 54	19 40	1 56	16 9		30	3 52	20 14	6 55	22 39	
	25	3 53	19 42	2 9	17 42		31	3 53	20 14	8 13	22 50	

o ^h Mittl.	Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östi. Stunden- Winkel	Halber Tag- bogen
Jan.	0	17 5 39.44	m +	21° 18′ 34.5		0.032326	22 ^h 28 ^m	h m
O toll.	I	17 10 38.21	+4 58.77		-1450.8	0.039796	22 29	4 I
	2	17 15 47.16	5 8.95	21 33 25.3	14 26.6	0.046913	22 30	3 59
			5 18.17	21 47 51.9	13 55.9	0.053688	22 31	
	3	17 21 5.33	5 26.54	22 1 47.8	13 19.5		_	3 57
	4	17 26 31.87	+5 34.17	22 15 7.3	—12 38.1	0.060135	22 33	3 56
	5	17 32 6.04	5 41.14	22 27 45.4	11 52.3	0.066268	22 34	3 55
	6	17 37 47.18	5 47.52	22 39 37.7	11 2.4	0.072098	22 36	3 53
	7	17 43 34.70	5 53.35	22 50 40.1	10 8.9	0.077639	22 38	3 52
	8	17 49 28.05	5 58.71	23 0 49.0	9 12.2	0.082903	22 40	3 50
	9	17 55 26.76		23 10 1.2		0.087901	22 42	3 49
	10	18 1 30.41	+6 3.65	23 18 13.9	- 8 12.7	0.092644	2 2 44	3 48
	II	18 7 38.60	6 8.19		7 10.5	0.097142	22 46	3 47
	12	18 13 51.00	6 12.40	23 25 24.4	6 6.1			
		2	6 16.29	23 31 30.5	4 59-5	0.101405	.,	
	13	, ,	6 19.88	23 36 30.0	3 50.9	0.105442	22 51	3 46
	14	18 26 27.17	+6 23.20	23 40 20.9	- 2 40.5	0.109262	22 53	3 45
	15	18 32 50.37	6 26.29	-23 43 1.4	1 28.6	0.112873	22 56	3 45
	16	18 39 16.66	6 29.14	23 44 30.0	- o 15.1	0.116281	22 58	3 45
	17	18 45 45.80		23 44 45.1	_	0.119494	23 I	3 45
	18	18 52 17.59	6 31.79	23 43 45.4	+ 0 59.7	0.122517	23 3	3 45
	19	18 58 51.83	6 34.24	23 41 29.6	2 15.8	0.125357	23 6	3 45
	20	19 5 28.34	+6 36.51 6 38.62	-23 37 56.5	+ 3 33.1	0.128018	23 9	3 46
	21	19 12 6.96		23 33 4.9	4 51.6	0.130504	23 11	3 46
	22	19 18 47.54	6 40.58	23 26 53.9	6 11.0	0.132820	23 14	3 47
	23	19 25 29.94	6 42.40	23 19 22.5	7 31.4	0.134968	23 17	3 48
	24	19 32 14.00	6 44.06	23 10 29.7	8 52.8	0.136952	23 20	3 49
	25	19 38 59.61	+6 45.61	-23 0 14.8	+10 14.9	0.138774	23 22	3 50
	2 6	19 45 46.65	6 47.04	22 48 36.9	11 37.9	0.140436	23 25	3 52
	27	19 52 35.00	6 48.35	22 35 35.3	13 1.6	0.141938	23 28	3 53
	28	19 59 24.56	6 49.56	22 21 9.3	14 26.0	0.143282	23 31	3 55
	29	20 6 15.23	6 50.67	22 5 18.3	15 51.0	0.144467	23 34	3 57
		1	+6 51.69	1 1	+17 16.7			
	30	20 13 6.92	6 52.62	-21 48 1 .6	18 42.8	0.145493	23 37	3 59
	31	20 19 59.54	6 53.46	21 29 18.8	20 9.4	0.146360	23 40	4 I
Febr	. I	20 26 53.00	6 54.24	21 9 9.4	21 36.6	0.147065	23 43	4 3
	2	20 33 47.24		20 47 32.8	-	0.147607	23 46	4 6
	3	20 40 42.18	6 54.94	20 24 28.7	23 4.1	0.147983	23 49	4 8
	4	20 47 37.75	6 56.15	-19 59 56.7	1 -24 32.0	0.148189	23 52	4 11
	5	20 54 33.90		19 33 56.6		0.148221	23 55	4 14
	6	21 1 30.56	6 56.66	19 6 28.2	27 28.4	0 TA8075	23 58	4 17
	7	21 8 27.68	6 57.12	18 37 31.3	28 56.9	0.147745	OI	4 20
	8	21 15 25.20	6 57.52	18 7 5.8	30 25.5	0.147223	1	4 23

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	$Log. \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Febr. 7	21 8 27.68		70" 1" "		0.745545	h m	h m
Febr. 7 8		+6 57.52	-18 37 31.3	+30 25.5	0.147745	0 I	4 20
	21 15 25.20	6 57.87	18 7 5.8	31 54.0	0.147223	0 4	4 23
9	21 22 23.07	6 58.15	17 35 11.8	33 22.3	0.146503	0 7	4 27
10	21 29 21.22	6 58.37	17 1 49.5	34 50.4	0.145576	0 10	4 30
11	21 36 19.59	- 1 -6 58.52	16 26 59.1	+36 18.0	0.144433	0 13	4 34
12	21 43 18.11	6 58.58	-15 50 41.1	37 45.0	0.143062	0 16	4 37
13	21 50 16.69	6 58.55	15 12 56.1	39 11.0	0.141453	0 19	4 41
14	21 57 15.24	6 58.40	14 33 45.1	40 35.9	0.139592	0 22	4 45
15	22 4 13.64	6 58.11	13 53 9.2	41 59.4	0.137464	0 25	4 49
16	22 11 11.75		13 11 9.8		0.135054	0 28	4 53
17	22 18 9.40	+6 57.65	—12 27 48.8	+43 21.0		0 31	4 57
18		6 56.99		44 40.2	0.132345		5 1
		6 56.07	1.5	45 56.7	0.129319	٠.	_
19	22 32 2.46	6 54.84	10 57 11.9	47 9.6	0.125955	31	5 5
20	22 38 57.30	6 53.24	10 10 2.3	48 18.3	0.122232	0 40	5 10
21	22 45 50.54	4-6 51.20	9 21 44.0	+49 22.1	0.118127	0 43	5 14
22	22 52 41.74	6 48.63	8 32 21.9	50 19.8	0.113617	0 46	5 19
23	22 59 30.37	6 45.43	7 42 2.1	51 10.5	0.108678	0 49	5 23
24	23 6 15.80	6 41.49	6 50 51.6	51 53.0	0.103285	0 51	5 28
25	23 12 57.29	6 36.68	5 58 58.6	52 26.1	0.097413	0 54	5 32
26	23 19 33.97	+6 30.88	5 6 32.5	+52 48.2	0.091039	° 57	5 37
27	23 26 4.85		- 4 I3 44.3		0.084141	1 0	5 41
28	23 32 28.82	6 23.97	3 20 46.2	52 58.1	0.076699	I 2	5 46
März 1	23 38 44.61	6 15.79	2 27 51.7	52 5 4-5	0.068696	I 4	5 51
2	23 44 50.82	6 6.21	1 35 15.9	52 35.8	0.060121	16	5 55
3	23 50 45.93	5 55.11	- 0 43 15.2	52 0.7	0.050968	т 8	6 0
4	23 56 28.32	+5 42.39		+51 8.4	0.041238	1 10	6 4
5	o 1 56.26	5 27.94	0 57 51.0	49 57.8		1 12	6 9
6		5 11.71		48 28.2	0.030939	1	6 13
	1 / / / /	4 53.67	1 46 19.2	46 39.4	0.020088	,	6 17
7 8	0 12 1.64	4 33.83	2 32 58.6	44 31.4	0.008712	I 14	6 21
О	35 17	+4 12.24	3 17 30.0	+42 4.5	9.996846	1 14	0 41
9	0 20 47.71	3 48.99	+ 3 59 34.5		9.984535	1 15	6 25
10	0 24 36.70		4 38 53.7	39 19.2	9.971835	1 15	6 28
11	0 28 0.90	3 24.20	5 15 10.0	36 16.3	9.958809	1 14	6 31
12	0 30 58.92	2 58.02	5 48 6.8	32 56.8	9.945529	I 13	6 34
13	0 33 29.59	2 30.67	6 17 28.9	29 22.1	9.932077	1 12	6 37
14	0 35 31.97	+2 2.38	+ 6 43 2.4	+25 33.5	9.918541	1 10	6 39
15	0 37 5.40	1 33.43	7 4 35.0	21 32.6	9.905015	I 7	6 4r
16	0 38 9.53	1 4.13	7 21 56.2	17 21.2	9.891599	I 4	6 42
17	0 38 44.36	0 34.83	· ·	13 1.3	9.878400	II	6 44
18		0 5.89	7 34 57.5	8 35.2	1		
10	0 38 50.25		7 43 32.7		9.865527	0 57	6 44

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Manara	o 38 44.36	m #	1 5 04 55 5		9.878400	h m	6 ^h 44 ^m
März 17		4-0 5.89	+7 34 57.5	+ 8 35.2		1 I	_
	0 38 50.25	-o 22.25	7 43 32.7	+ 4 5.6	9.865527	0 57	
19	0 38 28.00	0 49.16	7 47 38.3	- 0 24.4	9.853093	0 52	1.7
20	0 37 38.84	1 14.40	7 47 13.9	4 51.1	9.841210	0 48	6 45
21	0 36 24.44	-I 37.52	7 42 22.8	- 9 1 0.7	9.829988	0 43	6 44
22	0 34 46.92	1 58.06	十7 33 12.1	13 19.1	9.819535	0 37	6 43
23	0 32 48.86	2 15.66	7 19 53.0	17 11.6	9.809952	0 31	6 42
24	0 30 33.20	2 29.97	7 2 41.4	20 44.1	9.801329	0 25	6 41
25	0 28 3.23		6 41 57.3	1	9.793743	0 19	6 39
26	0 25 22.47	2 40.76	6 18 4.9	23 52.4	9.787257	0 12	6 37
		-2 47.85		-26 32.8			_
27	0 22 34.62	2 51.21	+5 51 32.1	28 42.4	9.781914	0 5	6 34
28	0 19 43.41	2 50.89	5 22 49.7	30 19.4	9.777740	23 59	6 32
29	0 16 52.52	2 47.08	4 52 30.3	31 22.8	9.774741	23 52	6 29
30	0 14 5.44	2 40.01	4 21 7.5	31 53.0	9.772902	23 45	6 26
31	0 11 25.43	-2 30.02	3 49 14.5	-31 51.0	9.772191	23 39	6 24
April I	0 8 55.41		+3 17 23.5		9.772560	23 32	6 21
2	0 6 37.91	2 17.50	2 46 4.4	31 19.1	9.773947	23 26	6 18
3	0 4 35.06	2 2.85	2 15 44.4	30 20.0	9.776280	23 20	6 15
4	0 2 48.55	1 46.51	1 46 47.2	28 57.2	9.779480	23 14	6 13
5	0 1 19.69	1 28.86	1 19 33.0	27 14.2	9.783465	23 9	6 11
6	0 0 9.38	-1 10.31	+0 54 18.5	-25 14.5	9.788150	23 4	6 8
7	23 59 18.19	0 51.19	0 31 16.7	23 1.8	9.793452	22 59	6 6
8	23 58 46.37	0 31.82	+0 10 37.5	20 39.2	9.799291	22 54	6 5
9	23 58 33.93	-0 12.44	-0 7 32.I	18 9.6	9.805591	22 50	6 3
10	23 58 40.66	+0 6.73	0 23 7.7	15 35.6	9.812281	22 46	6 2
		-Ho 25.52		-12 59.4			
II	23 59 6.18	0 43.80	-0.36 7.1	10 22.8	9.819298	22 43	6 I
12	23 59 49.98	1 1.47	0 46 29.9	7 47-2	9.826583	22 40	6 0
13	0 0 51.45	1 18.49	0 54 17.1	5 13.6	9.834084	22 37	5 59
14	0 2 9.94	1 34.81	0 59 30.7	2 43.1	9.841755	22 34	5 58
15	0 3 44.75	· H I 50.40	1 2 13.8	- 0 16.3	9.849556	22 32	5 58
16	0 5 35.15		<u> </u>	+ 2 6.5	9.857451	22 30	5 58
17	0 7 40.41	2 5.26	1 0 23.6		9.865409	22 28	5 58
18	0 9 59.82	2 19.41	0 55 58.6	4 25.0	9.873405	22 26	5 59
19	0 12 32.71	2 32.89	0 49 19.7	6 38.9	9.881417	22 25	5 59
20	0 15 18.42	2 45.71	0 40 31.6	8 48.1	9.889424	22 24	6 0
21	0 18 16.33	+2 57.91	-0 29 38.9	+10 52.7	0.807411	22 23	6 1
22	0 21 25.84	3 9.51	0 16 46.3	12 52.6	0.005264		6 2
23	0 24 46.41	3 20.57	_0 I 58.4	14 47.9	0.012272	1	6 3
_	0 28 17.55	3 31.14	+0 14 40.4	16 38.8		1	6 5
24		3 41.25		18 25.4	9.921125		-
25	0 31 58.80		0 33 5.8		9.928915	22 21	6 7

Wahrer geozentrischer Ort.											
o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen				
	h m s		o + #			h m	6 ^h 5 ⁿ				
April 24	0 28 17.55	-F3 41.25	+ 0 14 40.4	+18 25.4	9.921125	22 21					
25	0 31 58.80	3 50.95	0 33 5.8	20 7.7	9.928915	22 21	6 7				
2 6	0 35 49.75	4 0.28	0 53 13.5	21 45.9	9.936636	22 20	6 8				
27	0 39 50.03	4 9.28	I 14 59.4	23 20.2	9.944281	22 21	6 10				
28	0 43 59.31	+4 18.01	1 38 19.6	-H-24 50.6	9.951847	22 21	6 12				
29	0 48 17.32	4 26.48	+ 2 3 10.2		9.959330	22 21	6 14				
30	0 52 43.80		2 29 27.4	26 17.2	9.966725	22 22	6 17				
Mai I	0 57 18.56	4 34.76	2 57 7.7	27 40.3	9.974030	22 22	6 19				
2	1 2 1.44	4 42.88	3 26 7.7	29 0.0	9.981243	22 23	6 22				
3	1 6 52.32	4 50.88	3 56 23.9	30 16.2	9.988360	22 24	6 24				
		- 1-4 58.79		+31 29.0							
4	1 11 51.11	5 6.65	+ 4 27 52.9	32 38.5	9.995379	22 25	6 27				
5	1 16 57.76	5 14.51	5 0 31.4	33 44.7	0.002298	22 26	6 30				
6	1 22 12.27	5 22.38	5 34 16.1	34 47.6	0.009113	22 27	6 33				
7	1 27 34.65	5 30.30	6 9 3.7	35 47-3	0.015820	22 29	6 36				
8	1 33 4.95		6 44 51.0		0.022416	22 30	6 39				
9	1 38 43.28	+5 38.33	+ 7 21 34.5	+36 43.5	0.028897	22 32	6 42				
10	1 44 29.74	5 46.46	7 59 10.9	37 36.4	0.035258	22 34	6 46				
11	1 50 24.48	5 54-74	8 37 36.6	38 25.7	0.041493	22 36	6 49				
12	1 56 27.67	6 3.19	9 16 47.9	39 11.3		22 38	6 53				
		6 11.84		39 52.9	0.047595	22 40	1				
13	2 2 39.51	+6 20.72	9 56 40.8	+40 30.5	0.053557	22 40	6 57				
14	2 9 0.23	6 29.83	+10 37 11.3	41 3.7	0.059370	22 43	7 0				
15	2 15 30.06	6 39.20	11 18 15.0	41 32.1	0.065025	22 45	7 4				
16	2 22 9.26	6 48.82	11 59 47.1		0.070510	22 48	7 8				
17	2 28 58.08		12 41 42.4	41 55.3	0.075814	22 51	7 12				
18	2 35 56.79	6 58.71	13 23 55.3	42 12.9	0.080921	22 54	7 16				
		+7 8.85		+42 24.4							
19	2 43 5.64	7 19.23	+14 6 19.7	42 29.1	0.085817	22 57	7 20				
20	2 50 24.87	7 29.82	14 48 48.8	42 26.4	0.090486	23 0	7 25				
21	2 57 54.69	7 40.57	15 31 15.2	42 15.7	0.094908	23 4	7 29				
22	3 5 35.26	7 51.43	16 13 30.9	41 56.1	0.099064	23 8	7 33				
23	3 13 26.69	+8 2.31	16 55 27.0	-I-41 27.0	0.102933	23 12	7 38				
24	3 21 29.00		+17 36 54.0		0.106492	23 16	7 42				
25	3 29 42.13	8 13.13	18 17 41.7	40 47.7	0.109720	23 20	7 46				
2 6	3 38 5.89	8 23.76	18 57 39.0	39 57-3	0.112593	23 24	7 51				
27	3 46 39.97	8 34.08	19 36 34.3	38 55.3	0.115088	23 29	7 55				
28	3 55 23.93	8 43.96	20 14 15.6	37 41.3	0.117183	23 34	7 59				
		+8 53.22		1-36 15.0		45 54					
29	4 4 17.15	9 1.70	+20 50 30.6	34 36.3	0.118857	23 39	8 4				
30	4 13 18.85	9 9.24	21 25 6.9	32 45.4	0.120093	23 44	8 8				
_ 31	4 22 28.09	9 15.67	21 57 52.3	30 42.9	0.120874	23 49	8 12				
Juni 1	4 31 43.76	9 20.88	22 28 35.2	28 29.6	0.121189	23 54	8 15				
2	4 41 4.64	9 20.00	22 57 4.8	20 29.0	0.121031	0 0	8 19				

o ^h Mittl.		AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
T., '		h m 8		6 0 "		0 -	h m	8 ^h 15 ^m
Juni	I	4 31 43.76	+9 20.88	+22 28 35.2	+28 29.6	0.121189	23 54	
	2	4 41 4.64	9 24.73	22 57 4.8	26 6.6	0.121031	0 0	8 19
	3	4 50 29.37	9 27.13	23 23 11.4	23 35.2	0.120395	0 5	
	4	4 59 56.50	9 28.04	23 46 46.6	20 57.1	0.119284	0 II	8 25
	5	5 9 2 4.54	+9 27.45	24 7 43.7	4-18 14.0	0.117704	0 16	
	6	5 18 51.99	9 25.36	+24 25 57.7	15 27.8	0.115665	0 22	8 30
	7	5 28 17.35	9 21.85	24 41 25.5	12 40.1	0.113181	0 27	8 32
	8	5 37 39.20	9 16.99	24 54 5.6	9 52.8	0.110270	0 33	8 34
	9	5 46 56.19	9 10.89	25 3 58.4		0.106953	0 38	8 35
	10	5 56 7.08		25 11 5.7	7 7.3	0.103251	0 43	8 36
	11	6 5 10.73	+9 3.65	+25 TE 207	+ 4 25.0	0.099187	0 48	8 37
	12	6 14 6.13	8 55.40	+25 15 30.7	+ 1 47.0	0.094786		21
		6 22 52.42	8 46.29	25 17 17.7 25 16 32.3	- 0 45.4	1	o 53	51
	13	2 1	8 36.42	, , ,	3 11.6	0.090070	_	51
	14		8 25.92	25 13 20.7	5 31.2	0.085063	1 3	31
	15	6 39 54.76	-1-8 14.89	2 5 7 49·5	- 7 43.7	0.079786	1 7	8 36
	16	6 48 9.65	8 3.43	+25 0 5.8	9 48.7	0.074262	I 12	8 35
	17	6 56 13.08	3 13	24 50 17.1	11 46.2	0.068509	1 16	8 34
	18	7 4 4.71	7 51.63	24 38 30.9		0.062546	I 20	8 32
	19	7 11 44.26	7 39.55	24 24 54.8	13 36.1	0.056389	I 23	8 30
	20	7 19 11.54	7 27.28	24 9 36.4	15 18.4	0.050054	1 27	8 28
	21	7 26 26.38	+7 14.84	-1-23 52 43.2	-16 53.2	0.043555	1 30	8 26
	22	7 33 28.67	7 2.29	23 34 22.5	18 20.7	0.036903	1 33	8 24
	23	7 40 18.32	6 49.65	23 14 41.5	19 41.0	0.030111	1 36	8 21
	24	7 46 55.27	6 36.95	22 53 47.3	20 54.2	0.023188	I 39	8 18
	25	7 53 19.49	6 24.22	22 31 46.8	22 0.5	0.016143	1 41	8 16
			+6 11.44		-23 O.I	_	'	
	2 6	7 59 30.93	5 58.62	-1-22 8 46.7	23 53.2	0.008984	I 44	8 13
	27	8 5 29.55	5 45.77	21 44 53.5	24 39.9	0.001720	I 46	8 10
	28	8 11 15.32	5 32.88	21 20 13.6	25 20.3	9.994356	I 47	8 7
	29	8 16 48.20	5 19.93	20 54 53.3	25 54.5	9.986899	I 49	8 4
	30	8 22 8.13	+5 6.91	20 28 58.8	-26 22.7	9.979355	1 50	8 1
Juli	I	8 27 15.04		-1-20 2 36.I	'	9.971729	1 52	7 58
	2	8 32 8.84	4 53.80	19 35 51.1	26 45.0	9.964027	1 53	7 55
	3	8 36 49.42	4 40.58	19 8 49.8	27 1.3	9.956254	1 53	7 52
	4	8 41 16.64	4 27.22	18 41 38.0	27 11.8	9.948415	1 54	7 49
	5	8 45 30.34	4 13.70	18 14 21.6	27 16.4	9.940517	1 54	7 46
	6	8 49 30.32	+3 59.98	+17 47 6.7	-27 14.9	9.932567		7 42
	7	8 53 16.37	3 46.05		27 7.5		, ,	7 43
	8	8 56 48.24	3 31.87		26 54.1	9.924570	٠, ر	
		, , , ,	3 17.41	33 3	26 34.6	9.916536	1 54	7 37
	9		3 2.64	, ,	26 8.8	9.908473	1 53	7 35
	10	9 3 8.29		16 0 21.7		9.900393	1 52	7 32

Wahrer	geozentrischer	Ort.
--------	----------------	------

Wahrer geozentrischer Ort.										
o" Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen			
	b m s		0 1 0			h m	h m			
Juli 9	9 0 5.65	+3 2.64	+16°26 30.5	-26 8.8	9.908473	1 53	7 35			
10	9 3 8.29	2 47.54	16 0 21.7	25 36.5	9.900393	I 52	7 32			
11	9 5 55.83	2 32.09	15 34 45.2	24 57.8	9.892306	1 51	7 29			
12	9 8 27.92	2 16.25	15 9 47.4		9.884227	1 50	7 27			
13	9 10 44.17	+2 0.01	14 45 34.9	24 12.5 -23 20.2	9.876172	1 48	7 24			
14	9 12 44.18		+14 22 14.7		9.868159	1 46	7 22			
15	9 14 27.55	1 43.37	13 59 53.7	22 21.0	9.860209	I 44	7 20			
16	9 15 53.88	1 26.33	13 38 39.1	21 14.6	9.852346	1 41	7 18			
17	9 17 2.78	1 8.90	13 18 38.2	20 0.9	9.844598	1 38	7 16			
18	9 17 53.87	0 51.09	12 59 58.3	18 39.9	9.836996	1 35	7 14			
	0 10	+0 32.93		-17 11.4		3,	, ,			
19	9 18 26.80	+-0 14.49	+12 42 46.9	15 35.4	9.829574	I 32	7 12			
20	9 18 41.29	-0 4.15	12 27 11.5	13 52.2	9.822372	1 28	7 11			
21	9 18 37.14	0 22.88	12 13 19.3	12 1.9	9.815433	1 24	7 9			
22	9 18 14.26	0 41.60	12 1 17.4	10 4.9	9.808805	I 20	7 8			
23	9 17 32.66	-1 0.12	11 51 12.5	8 1.7	9.802542	1 15	7 7			
24	9 16 32.54	1 18.25	+11 43 10.8	5 53.0	9.796699	I 10	7 6			
25	9 15 14.29	1 35.77	11 37 17.8	3 39.9	9.791337	I 5	7 6			
26	9 13 38.52		11 33 37.9		9.786520	0 59	7 6			
27	9 11 46.09	I 52.43	11 32 14.2	- I 23.7	9.782314	0 54	7 5			
28	9 9 38.16	2 7.93 -2 21.96	11 33 8.6	+ 0 54.4	9.778785	0 48	7 6			
29	9 7 16.20		+11 36 21.5		9.776000	0 41	7 6			
30	9 4 42.00	2 34.20	11 41 51.2	5 29.7	9.774023	0 35	7 6			
31	9 1 57.66	2 44.34	11 49 34.0	7 42.8	9.772914	0 28	7 7			
Aug. I	8 59 5.58	2 52.08	11 59 24.0	9 50.0	9.772726	0 21	7 8			
2	8 56 8.48	2 57.10	12 11 13.3	11 49.3	9.773504	0 14	7 9			
		-2 59.17	+12 24 52.0	+13 38.7	9.775283	0 7	7 10			
3		2 58.11	12 40 8.2	15 16.2	9.778085	0 1	'			
4	,	2 53.80		16 40.2			'			
5	1/ / 1	2 46.17	, ,	17 49.2	9.781918	23 54	7 14			
6	8 44 31.23	2 35.26	13 14 37.6	18 42.4	9.786779	23 47	7 15			
7	8 41 55.97	-2 21.17	13 33 20.0	+19 19.0	9.792648	23 40	7 17			
8	8 39 34.80	'	+13 52 39.0		9.799492	23 34	7 19			
9	8 37 30.73	2 4.07	14 12 17.6	19 38.6	9.807266	23 28	7 21			
10	8 35 46.52	1 44.21	14 31 58.8	19 41.2	9.815912	23 22	7 23			
11	8 34 24.66	1 21.86	14 51 26.0	19 27.2	9.825363	23 17	7 25			
12	8 33 27.32	0 57-34	15 10 23.0	18 57.0	9.835544	23 12	7 27			
13	8 32 56.33	-0 30.99	+15 28 34.2		9.846375	23 8	7 29			
14	8 32 53.18	-0 3.15	15 45 44.6	17 10.4	9.857772	23 4	7 30			
15	8 33 18.99	+0 25.81	16 1 40.0	15 55.4	9.869648	23 0	7 32			
16	8 34 14.54	0 55.55	16 16 6.8	14 26.8	9.881916	22 57	7 34			
17	8 35 40.30	1 25.76	16 28 52.1	12 45.3	9.894487	22 55	7 35			
-/	35 40.30		1 10 40 54.1		1 9.09440/	1 ~~ 33	1 / 33			

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 16	8 34 14.54	m s	+16"16 6.8		9.881916	22 57 m	7 34
17	8 35 40.30	+1 25.76	16 28 52.1	+12 45.3	9.894487	22 55	7 35
18	8 37 36.44	1 56.14	16 39 43.8	10 51.7	9.907276	22 53	7 36
19	8 40 2.81	2 26.37	16 48 30.4	8 46.6	9.920200	22 51	7 37
20	8 42 58.98	2 56.17	16 55 1.1	6 30.7	9.933176	22 50	7 38
21	8 46 24.26	+3 25.28	+16 59 6.0	+ 4 4.9	9.946126	22 50	7 38
22	8 50 17.72	3 53.46	17 0 35.9	+ 1 29.9	9.958976	22 50	7 38
23	8 54 38.18	4 20.46	16 59 22.7	— I 13.2	9.971654	22 50	7 38
24	8 59 24.24	4 46.06	16 55 19.6	4 3.1	9.984094	22 5I	7 38
25	9 4 34.27	5 10.03	16 48 21.1	6 58.5	9.996233	22 52	7 37
2 6	9 10 6.47	1-5 32.20	+16 38 23.3	- 9 57.8	0.008015	22 54	7 36
27	9 15 58.89	5 52.42	16 25 24.2	12 59.1	0.019389	22 56	7 35
28	9 22 9.43	6 10.54	16 9 23.4	16 0.8	0.030310	22 58	7 33
29	9 28 35.90	6 26.47	15 50 22.8	19 0.6	0.040742	23 0	7 31
30	9 35 16.09	6 40.19	15 28 26.3	21 56.5	0.050654	23 3	7 29
		+6 51.68		-24 46.9			
31	9 42 7.77	7 1.01	+15 3 39.4	27 29.8	0.060024	23 6	7 26
Sept. 1	9 49 8.78	7 8.26	14 36 9.6	30 3.8	0.068839	23 9	7 23
2	9 56 17.04	7 13.55	14 6 5.8	32 27.8	0.077090	23 12	7 20
3	10 3 30.59	7 17.07	13 33 38.0	34 40.8	0.084778	23 16	7 17
4	10 10 47.66	+7 18.98	12 58 57.2	-36 42.1	0.091909	23 19	7 14
5	10 18 6.64	7 19.48	+12 22 15.1	38 31.5	0.098493	23 22	7 10
6	10 25 26.12	7 18.78	11 43 43.6	40 9.1	0.104547	23 26	7 7
7	10 32 44.90	7 17.05	11 3 34.5	41 35.3	0.110089	23 29	7 3
8	10 40 1.95	7 14.49	10 21 59.2	42 50.3	0.115141	23 33	6 59
9	10 47 16.44	+7 11.26	9 39 8.9		0.119726	23 36	6 55
10	10 54 27.70	·	+ 8 55 14.2	-43 54·7	0.123867	23 39	6 51
11	11 1 35.21	7 7.51	8 10 25.1	44 49-1	0.127589	23 42	6 47
12	11 8 38.59	7 3.38	7 24 50.8	45 34.3	0.130915	23 45	6 43
13	11 15 37.58	6 58.99	6 38 39.8	46 11.0	0.133868	23 48	6 39
14	11 22 32.00	6 54.42	5 51 59.8	46 40.0	0.136471	23 51	6 34
		1-6 49. 77		-47 I.9			
15	11 29 21.77	6 45.11	+ 5 4 57.9	47 17.4	0.138745	23 54	,
16	11 36 6.88	6 40.47	4 17 40.5	47 27.2	0.140709	23 57	6 26
17 18	11 42 47.35	6 35.92	3 30 13.3	47 31.7	0.142381	0 0	6 18
	11 49 23.27	6 31.50	2 42 41.6 1 55 10.0	47 31.6	0.143779	0 2	6 14
19	11 55 54.77	+6 27.22))	-47 27.2	0.144918	,	
20	12 2 21.99	6 23.09	+ I 7 42.8	47 19.0	0.145811	0 7	6 10
21	12 8 45.08	6 19.15	+ 0 20 23.8	47 7.5	0.146471	0 10	6 5
22	12 15 4.23	6 15.40	— o 26 43.7	46 52.9	0.146911	0 12	6 1
23	12 21 19.63	6 11.84	1 13 36.6	46 35.6	0.147140	0 15	5 57
24	12 27 31.47		2 0 12.2	. 35	0.147167	0 17	5 53

o ^t Mittl.		AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
0 ,		h m s		0 1 11		1	h m	h n
Sept		12 21 19.63	+6 11.84	— I I3 36.6	- 46 35.6	0.147140	0 15	5 57
	24	12 27 31.47	6 8.47	2 0 12.2	46 15.6	0.147167	0 17	5 53
	25	12 33 39.94	6 5.30	2 46 27.8	45 53-3	0.147000	0 19	5 49
	26	12 39 45.24	6 2.33	3 32 21.1	45 29.0	0.146647	0 2I	5 45
	27	12 45 47.57	1-5 59.54	4 17 50.1	-45 2.7	0.146113	0 23	5 41
	28	12 51 47.11		- 5 2 52.8		0.145403	0 25	5 37
	29	12 57 44.04	5 56.93	5 47 27.4	44 34.6	0.144523	0 27	5 33
	30	13 3 38.54	5 54.50	6 31 32.2	44 4.8	0.143475	0 29	5 29
Okt.	I	13 9 30.77	5 52.23	7 15 5.6	43 33.4	0.142262	0 31	5 26
	2	13 15 20.89	5 50.12	7 58 6.1	43 0.5	0.140887	0 33	5 22
			+5 48.17		-42 26.1		33	_
	3	13 21 9.06	5 46.35	- 8 40 32.2	41 50.3	0.139352	o 35	5 18
	4	13 26 55.41	5 44.66	9 22 22.5	41 13.3	0.137657	0 37	5 14
	5	13 32 40.07	5 43.08	10 3 35.8	40 35.0	0.135804	0 39	5 10
	6	13 38 23.15	5 41.61	10 44 10.8		0.133791	0 40	5 7
	7	13 44 4.76	1	11 24 6.2	39 55.4	0.131619	0 42	5 3
	8	13 49 44.99	+5 40.23	-12 3 20.8	-39 14.6	0.129286	0 44	4 59
	9	13 55 23.93	5 38.94	12 41 53.3	38 32.5	0.126790	0 46	4 56
	10	14 1 1.64	5 37.71	13 19 42.5	37 49-2	0.124130	0 47	4 52
	II	14 6 38.17	5 36.53	13 56 47.0	37 4-5	0.121303	''	
	12	14 12 13.54	5 35-37	14 33 5.6	36 18.6	0.118305	0 49 0 51	
			+5 34.23		-35 31.4	0 0		4 45
	13	14 17 47.77	5 33.08	-15 8 37.0	34 42.9	0.115134	0 52	4 41
	14	14 23 20.85	5 31.90	15 43 19.9	33 52.9	0.111784	0 54	4 38
	15	14 28 52.75	5 30.67	16 17 12.8	33 1.5	0.108251	0 56	4 35
	16.	14 34 23.42	5 29.35	16 50 14.3	32 8.7	0.104530	0 57	4 31
	17	14 39 52.77		17 22 23.0		0.100616	0 58	4 28
	18	14 45 20.69	+5 27.92	-17 53 37.3	-31 14.3	0.096502	ΙO	4 25
	19	14 50 47.04	5 26.35	18 23 55.5	30 18.2	0.092181	I 2	4 21
	20	14 56 11.63	5 24-59	18 53 16.0	29 20.5	0.087646	I 3	4 18
	21	15 I 34.24	5 22.61	19 21 37.0	28 21.0	0.082889	I 4	
	22	3	5 20.36	19 48 56.5	27 19.5	0.077902	1 4 1 6	4 15
	44	15 6 54.60	+5 17.79	19 40 50.5	26 16.1	0.077902	1 0	4 12
	23	15 12 12.39	5 14.85	-20 15 12.6	25 10.6	0.072677	1 7	4 9
	24	15 17 27.24	5 11.45	20 40 23.2	24 2.9	0.067204	1 8	4 7
	25	15 22 38.69		21 4 26.1		0.061473	I IO	4 4
	2 6	15 27 46.22	5 7.53	21 27 18.9	22 52.8	0.055474	1 11	4 I
	27	15 32 49.24	5 3.02 +4 57.83	21 48 59.2	21 40.3 -20 25.0	0.049197	1 12	3 59
	28	15 37 47.07	1	-22 9 24.2		0.042632	1 13	3 56
	29	15 42 38.91	4 51.84	22 28 31.1	19 6.9	0.035768	I 14	3 54
	30	15 47 23.85	4 44-94	22 46 16.9	17 45.8	0.028595	I 15	3 52
	31	15 52 0.86	4 37.01	23 2 38.2	16 21.3	0.021103	I 15	3 50
Nov.	I	15 56 28.77	4 27.91	23 17 31.5	14 53.3	0.013284	1 16	3 48
	-	1 2 30 40.//	1	43 1/ 31.3		0.013204	1 10	3 40

o ^h Mittl.	Zeit	AR.	Diff.	Dekl.	Diff.	$Log. \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
OLI		h m "oc		0 7 0			h m	h m
Okt.	31	15 52 0.86	+4 27.91	-23 2 38.2	14 53.3	0.021103	1 15	3 50
Nov.	1	15 56 28.77	4 17.46	23 17 31.5	13 21.5	0.013284	1 16	3 48
	2	16 0 46.23	4 5.51	23 30 53.0	11 45.5	0.005131	I 16	3 47
	3	16 4 51.74	3 51.88	23 42 38.5	10 5.0	9.996639	1 16	3 45
	4	16 8 43.62	+3 36.36	23 52 43.5	- 8 19.3	9.987804	1 16	3 44
	5	16 12 19.98	3 18.73	-24 I 2.8	6 28.1	9.978628	1 16	3 43
	6	16 15 38.71	2 58.79	24 7 30.9	4 30.8	9.969119	1 15	3 42
	7	16 18 37.50	2 36.30	24 12 1.7	2 26.7	9.959290	1 14	3 42
	8	16 21 13.80	2 11.08	24 14 28.4	,	9.949163	1 13	3 41
	9	16 23 24.88		24 14 43.3	- 0 14.9	9.938770	I II	3 41
	10	16 25 7.86	+1 42.98		+ 2 5.4	9.928159		
		,	1 11.85	-24 12 37.9	4 34-9		1 9	3 41
	II	16 26 19.71	0 37.67	24 8 3.0	7 14.2	9.917395	1 6	3 42
	12	16 26 57.38	1-0 0.63	24 0 48.8	10 4.0	9.906561	1 3	3 43
	13	16 26 58.01	-0 39.00	23 50 44.8	13 4.2	9.895765	0 59	3 44
	14	16 26 19.01	- I 20.67	23 37 40.6		9.885145	0 55	3 46
	15	16 24 58.34	2 3.48	-23 21 26.6		9.874864	0 49	3 48
	16	16 22 54.86		23 1 55.1	19 31.5	9.865118	0 43	3 50
	17	16 20 8.63	2 46.23	22 39 2.1	22 53.0	9.856129	0 37	3 53
	18	16 16 41.25	3 27.38	22 12 49.3	26 12.8	9.848141	0 29	3 56
	19	16 12 36.16	4 5.09	21 43 26.5	29 22.8	9.841407	0 21	3 59
	20	16 7 58.84	4 37.32	21 11 13.6	+32 12.9	9.836178	0 13	4 3
	21	16 2 56.76	5 2.08	20 36 42.9	34 30.7	9.832674	0 4	4 7
	2.2,	15 57 39.10	5 17.66	20 0 38.7	36 4.2	9.831070	23 54	4 11
	23	15 52 16.27	5 22.83	19 23 56.3	36 42.4	9.831474	23 45	4 15
	24	15 46 59.14	5 17.13	18 47 38.1	36 18.2	9.833912	23 36	4 19
			-5 o.88		1-34 48.8			
	25 26	15 41 58.26	4 35.18	-18 12 49.3	32 17.3	9.838323	23 27	4 23
		15 37 23.08	4 1.73	17 40 32.0	28 52.3	9.844568	23 18	4 26
	27	15 33 21.35	3 22.53	17 11 39.7	24 45.6	9.852441	23 10	4 29
	28	15 29 58.82	2 39.67	16 46 54.1	20 11.2	9.861692	23 3	4 32
	29	15 27 19.15	-r 55.10	16 26 42.9	+15 23.2	9.872049	22 56	4 34
	30	15 25 24.05	1 10.46	-16 11 19.7	10 34.1	9.883239	22 50	4 35
Dez.	1	15 24 13.59	-0 27.03	16 0 45.6		9.895006	22 45	4 36
	2	15 23 46.56		15 54 51.4	5 54.2	9.907118	22 41	4 37
	3	15 24 0.80	+0 14.24	15 53 20.2	+ 1 31.2	9.919376	22 37	4 37
	4	15 24 53.56	0 52.76	15 55 50.1	- 2 29.9	9.931616	22 34	4 37
	5	15 26 21.81	+1 28.25	—16 I 56.3	- 6 6.2	9.943707	22 32	4 36
	6	15 28 22.38	2 0.57	16 11 12.7	9 16.4	9.955547	22 30	4 35
	7	15 30 52.15	2 29.77	16 23 13.6	12 0.9	9.967062	22 28	4 34
	8	15 33 48.15	2 56.00	16 37 34.0	14 20.4	9.978197	22 27	
	9	15 37 7.62	3 19-47	16 53 50.6	16 16.6	9.988917		
	9	1-5 3/ 7.04		10 53 50.0		9.90091/	22 27	4 31

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Jan. o	21 40 13.34 21 44 47.10 21 49 19.23	+4 33.76 4 32.13 4 30.51	-15°50′21″.5 15°25′9.1 14′59°34.4	+25 12.4 25 34.7 25 56.4	o.oo2792 9.999847 9.996874	3 2 m 3 3 3 3	4 37 4 40 4 42
3 4 5	21 53 49.74 21 58 18.63 22 2 45.93	4 28.89 +4 27.30 4 25.70	14 33 38.0 14 7 20.9 —13 40 43.8	26 17.1 +26 37.1 26 56.3	9.993871 9.99 ⁰⁸ 37 9.9 ⁸ 7773	3 4 3 5 3 5	4 45 4 47 4 50
6 7 8 9	22 7 11.63 22 11 35.75 22 15 58.30 22 20 19.28	4 24.12 4 22.55 4 20.98	13 13 47.5 12 46 32.9 12 19 0.7 11 51 11.7	27 14.6 27 32.2 27 49.0	9.984678 9.981551 9.978391 9.975199	3 6 3 6 3 6 3 7	4 53 4 55 4 58 5 0
10 11 12	22 24 38.71 22 28 56.61 22 33 12.99	4 17.90 4 16.38 4 14.87	-11 23 6.8 10 54 46.8 10 26 12.4	+28 4.9 28 20.0 28 34.4 28 47.9	9.971974 9.968715 9.965422	3 7 3 8 3 8	5 3 5 6 5 8
13 14 15 16	22 37 27.86 22 41 41.23 22 45 53.11 22 50 3.52	4 13.37 +4 11.88 4 10.41	9 57 24.5 9 28 24.0 8 59 11.5 8 29 47.9	29 0.5 +29 12.5 29 23.6	9.962094 9.958731 9.955332 9.951896	3 8 3 8 3 9 3 9	5 11 5 14 5 16 5 19
17 18 19	22 54 12.47 22 58 19.97 23 2 26.04	4 8.95 4 7.50 4 6.07	8 0 14.0 7 30 30.7 7 0 38.6	29 33.9 29 43.3 29 52.1 +30 0.0	9.948424 9.944915 9.941369	3 9 3 9 3 9	5 21 5 24 5 27
20 21 22 23 24	23 6 30.68 23 10 33.91 23 14 35.74 23 18 36.20 23 22 35.30	4 3.23 4 1.83 4 0.46 3 59.10	- 6 30 38.6 6 0 31.5 5 30 17.9 4 59 58.5 4 29 34.2	30 7.1 30 13.6 30 19.4 30 24.3	9.937785 9.934162 9.930501 9.926801 9.923061	3 10 3 10 3 10 3 10 3 10	5 29 5 32 5 35 5 38 5 40
25 26 27 28 29	23 26 33.06 23 30 29.49 23 34 24.60 23 38 18.41 23 42 10.92	3 56.43 3 55.11 3 53.81 3 52.51	- 3 59 5.7 3 28 33.6 2 57 58.6 2 27 21.4 1 56 42.8	+30 28.5 30 32.1 30 35.0 30 37.2 30 38.6	9.919281 9.915461 9.911600 9.907697 9.903751	3 10 3 10 3 10 3 10 3 10	5 43 5 46 5 48 5 51 5 54
3° 31 Febr. 1 2	23 46 2.15 23 49 52.11 23 53 40.80 23 57 28.22 0 1 14.36	+3 51.23 3 49.96 3 48.69 3 47.42 3 46.14	- 1 26 3.4 0 55 23.9 - 0 24 45.0 + 0 5 52.5 0 36 28.0	+3° 39.4 3° 39.5 3° 38.9 3° 37.5 3° 35.5	9.899762 9.895729 9.891651 9.887527 9.883357	3 10 3 10 3 9 3 9 3 9	5 56 5 59 6 1 6 4 6 7
4 5 6 7 8	0 4 59.23 0 8 42.82 0 12 25.13 0 16 6.14 0 19 45.84	+3 44.87 3 43.59 3 42.31 3 41.01 3 39.70	+ I 7 0.7 I 37 29.9 2 7 55.0 2 38 I5.2 3 8 29.7	30 20.2	9.879140 9.874875 9.870561 9.866197 9.861783	3 9 3 9 3 9 3 8 3 8	6 9 6 12 6 15 6 17 6 20

o ^b Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Febr. 7	h m #	m s	1 0°00' 75"0		0 866x07	3 8 m	h m
•	0"16" 6.14	-H-3 39.70	+ 2 38 15.2	+30 14.5	9.866197	9	6 17
8	0 19 45.84	3 38.37	3 8 29.7	30 8.1	9.861783	3 8	6 20
9	0 23 24.21	3 37.02	3 38 37.8	30 0.9	9.857317	3 8	6 23
10	0 27 1.23	3 35.64	4 8 38.7	29 53.2	9.852800	3 7	6 25
11	0 30 36.87	+3 34.24	4 38 31.9	+29 44.6	9.848230	3 7	6 28
12	0 34 11.11	3 32.82	+ 5 8 16.5	29 35.2	9.843606	3 7	6 31
13	0 37 43.93		5 37 51.7	29 25.2	9.838927	3 6	6 33
14	0 41 15.28	3 31.35 3 29.85	6 7 16.9	29 25.2	9.834194	3 6	6 36
15	0 44 45.13		6 36 31.3		9.829405	3 5	6 38
16	0 48 13.44	3 28.31	7 5 34.2	29 2.9	9.824560	3 5	6 41
		+3 26.73		+28 50.6			
17	0 51 40.17	3 25.10	+ 7 34 24.8	28 37.6	9.819658	3 4	6 44
18	0 55 5.27	3 23.42	8 3 2.4	28 23.9	9.814699	3 4	6 46
19	0 58 28.69	3 21.69	8 31 26.3	28 9.5	9.809682	3 3	6 49
2,0	1 1 50.38	3 19.90	8 59 35.8	27 54-4	9.804607	3 3	6 51
21	1 5 10.28	+3 18.06	9 27 30.2	+27 38.6	9.799474	3 2	6 54
22	1 8 28.34	3 16.17	+ 9 55 8.8	27 22.3	9.794282	3 1	6 56
23	1 11 44.51	3 14.20	10 22 31.1	27 5.2	9.789030	3 I	6 59
24	1 14 58.71	3 12.17	10 49 36.3	26 47.5	9.783719	3 0	7 x
25	1 18 10.88	3 10.06	11 16 23.8	26 29.0	9.778347	2 59	7 4
2 6	1 21 20.94	+3 7.87	11 42 52.8	+-26 9.9	9.772915	2 59	7 6
27	1 24 28.81		+-12 9 2.7		9.767422	2 58	7 9
28	1 27 34.41	3 5.60	12 34 52.8	25 50.1	9.761867	2 57	7 11
März 1	1 30 37.65	3 3.24	13 0 22.4	25 29.6	9.756249	2 56	7 14
2	1 33 38.42	3 0.77	13 25 30.8	25 8.4	9.750569	2 55	7 16
3	1 36 36.61	2 58.19	13 50 17.2	24 46.4	9.744826	2 54	7 19
4	1 39 32.11	+-2 55.50	+14 14 40.9	+-24 23.7	9.739019	2 53	7 21
	0,0	2 52.68	14 38 41.1	24 0.2		2 52	,
5	I 42 24.79	2 49.72		23 35.9	9.733149	_	' '
	1 45 14.51	2 46.62	,	23 10.7	9.727215	2 51	,
7	1 48 1.13	2 43.38	15 25 27.7	22 44.7	9.721217	2 50	7 29
8	1 50 44.51	+2 39.97	15 48 12.4	+22 17.8	9.715156	2 49	7 31
9	1 53 24.48	2 36.39	+16 10 30.2	21 50.0	9.709031	2 47	7 33
10	1 56 0.87	2 32.64	16 32 20.2	21 21.3	9.702843	2 46	7 35
11	1 58 33.51		16 53 41.5	_	9.696593	2 45	7 37
12	2 1 2.22	2 28.71	17 14 33.1	20 51.6	9.690282	2 43	7 40
13	2 3 26.79	2 24.57 +2 20.22	17 34 53.9	20 20.8	9.683911	2 42	7 42
14	2 5 47.01		+17 54 42.8	-F-19 48.9	9.677480	2 40	7 44
15	2 8 2.67	2 15.66	18 13 58.8	19 16.0	9.670993	2 38	7 46
- 16	2 10 13.56	2 10.89	18 32 40.8	18 42.0	9.664451	2 37	7 48
17	2 12 19.44	2 5.88	18 50 47.6	18 6.8	9.657856	2 35	
18		2 0.63	19 8 17.8	17 30.2	9.651212		
10	2 14 20.07		1 19 0 17.0		1 9.051212	2 33	7 52

		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	geozentiis	onor o	^ V*		
o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
1/1"	h m s		00		60.6	h m	h m
März 17	2 12 19.44	-+2 0.63	+18°50 47.6	+17 30.2	9.657856	2 35	7 50
18	2 14 20.07	1 55.14	19 8 17.8	16 52.4	9.651212	2 33	7 52
19	2 16 15.21	1 49.39	19 25 10.2	16 13.3	9.644521	2 31	7 54
20	2 18 4.60	1 43.39	19 41 23.5	15 32.8	9.637789	2 29	7 56
21	2 19 47.99	+1 37.15	19 56 56,3	+14 50.8	9.631019	2, 2,6	7 57
22	2 21 25.14	1 30.66	+20 11 47.1	14 7.4	9.624216	2 24	7 59
23	2 22 55.80	1 23.91	20 25 54.5	13 22.5	9.617386	2 22	8 I
24	2 24 19.71	1 16.91	20 39 17.0		9.610534	2 19	8 2
25	2 25 36.62	1	20 51 52.8	12 35.8	9.603667	2 16	8 4
26	2 26 46.29	1 9.67	21 3 40.2	11 47.4	9.596793	2 14	8 5
27	2 27 48.46	+·I 2.17		+10 57.1	9.589919	2 11	8 6
28	2 28 42.88	0 54.42	+21 14 37.3	10 5.2		2 8	8 8
		0 46.42	21 24 42.5	9 11.2	9.583053		_
29	2 29 29.30	0 38.20	21 33 53.7	8 15.0	9.576204	2 5	8 10
30	2 30 7.50	0 29.77	21 42 8.7	7 16.7	9.569383	2, I	_
31	2 30 37.27	+0 21.12	21 49 25.4	+ 6 16.1	9.562600	1 58	8 11
April 1	2 30 58.39	0 12.28	+21 55 41.5	5 13.2	9.555867	1 54	8 11
2	2 31 10.67	+0 3.27	22 0 54.7	4 7.8	9.549198	1 50	8 12
3	2 31 13.94	-o 5.86	22 5 2.5		9.542606	I 47	8 12
4	2 31 8.08		22 8 2.6		9.536106	1 43	8 13
5	2 30 52.99	0 15.09	22 9 52.5	1 49.9	9.529714	1 38	8 13
6	2 30 28.59	-0 24.40	+22 10 29.8	+ 0 37.3	9.523447	I 34	8 13
7	2 29 54.86	0 33.73	22 9 52.1	- 0 37.7	9.517324	1 29	8 13
8	2 29 11.84	0 43.02	22 7 57.1	1 55.0	9.511363	1 25	8 13
9	2 28 19.59	0 52.25	22 4 42.8	3 14.3	9.505585	1 20	8 12
10	2 27 18.26	1 1.33	22 0 7.1	4 35.7	9.500011	1 15	8 12
11	2 26 8.06	-1 10.20	,	- 5 58.7			8 11
		1 18.80	1	7 23.1	9.494663		_
12	2 24 49.26	1 27.06	21 46 45.3	8 48.3	9.489563	I 4	
13	2 23 22.20	1 34.91	21 37 57.0	10 13.9	9.484733	0 59	8 9
14	2 21 47.29	1 42.27	21 27 43.1	11 39.5	9.480197	0 54	8 8
15	2 20 5.02	-1 49.03	21 16 3.6	-13 4.3	9.475979	0 48	8 7
16	2 18 15.99		+21 2 59.3	14 27.6	9.472101	0 42	8 5
17	2 16 20.86	1 55.13	20 48 31.7	15 48.6	9.468585	0 36	8 3
18	2 14 20.35	2 0.51	20 32 43.1		9.465452	0 31	8 1
19	2 12 15.25	2 5.10	20 15 36.4	' '	9.462721	0 24	8 0
20	2 10 6.41	2 8.84 -2 11.68	19 57 15.5	18 20.9	9.460411	0 18	7 57
2.1	2 7 54.73		+19 37 45.2	-19 30.3	9.458536	0 12	7 55
22	2 5 41.16	2 13.57	19 17 10.9	20 34.3	9.457109	0 6	7 53
23	2 3 26.66	2 14.50	18 55 38.9	21 32.0	9.456139	0 0	7 51
-5 24	2 1 12.16	2 14.50	18 33 16.1	22 22.8	9.455633	23 54	7 48
25	1 58 58.61	2 13.55	18 10 9.6	23 6.5	9.455596	23 48	7 46
45	1 - 30 30.01		1 10 10 9.0	4	1 7.433390	1 45 40	/ 40

o' Mittl.		AR.	Diff.	Dekl.	Diff.	$Log. \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Anni	104	h m s	m a	1.78"00' 76"7		0 155600	h m	h om
Apri		2 I I2.16	-2 13.55	+18 33 16.1	-23 6.5	9.455633	23 54	7 48 m
	25	1 58 58.61	2 11.65	18 10 9.6	23 42.3	9.455596	23 48	7 46
	26	1 56 46.96	2 8.85	17 46 27.3	24 9.9	9.456028	23 41	7 43
	27	1 54 38.11	2 5.19	17 22 17.4	24 29.1	9.456926	23 35	7 41
	28	I 52 32.92	-2 0.74	16 57 48.3	-24 39.9	9.458284	23 29	7 38
	29	1 50 32.18	1 55.54	+16 33 8.4	24 42.2	9.460094	23 23	7 35
	30	1 48 36.64		16 8 26.2		9.462344	23 17	7 33
Mai	1	1 46 46.99	1 49.65	15 43 49.7	24 36.5	9.465021	23 12	7 30
	2	I 45 3.84	1 43.15	15 19 27.0	24 22.7	9.468109	23 6	7 28
	3	I 43 27.72	1 36.12	14 55 25.6	24 1.4	9.471589	23 0	7 25
	-		-1 28.62		-23 32.9			
	4	I 4I 59.10	1 20.72	+14 31 52.7	22 57.9	9.475443	22 55	7 23
	5	1 40 38.38	1 12.48	14 8 54.8	22 17.0	9.479650	22 50	7 21
	6	1 39 25.90	1 4.01	13 46 37.8	21 30.7	9.484188	22 45	7 18
	7	1 38 21.89	0 55.36	13 25 7.1	20 39.6	9.489035	22 40	7 16
	8	1 37 26.53	-0 46.57	13 4 27.5	-19 44.3	9.494169	22 35	7 14
	9	I 36 39.96	0 37.70	+-12 44 43.2	18 45.5	9.499568	22 30	7 12
	10	1 36 2.26	0 28.79	12 25 57.7	17 43.8	9.505208	22 25	7 11
	II	I 35 33.47		12 8 13.9	-	9.511069	22 21	7 9
	12	I 35 I3.58	0 19.89	11 51 34.0	16 39.9	9.517130	22 17	7 7
	13	I 35 2.53	0 11.05	11 35 59.9	15 34.1 —14 26.9	9.523370	22 13	7 6
	14	I 35 0.25		+11 21 33.0	13 18.7	9.529769	22 9	7 4
	15	I 35 6.63	10 6.38	11 8 14.3	12 10.0	9.536308	22 5	7 3
	16	I 35 21.54	0 14.91	10 56 4.3		9.542970	22 I	7 2
	17	I 35 44.83	0 23.29	10 45 3.2	11 1.1	9.549738	21 58	7 I
	18	1 36 16.32	0 31.49	10 35 10.6	9 52.6	9.556596	21 54	7 0
	19	1 36 55.83	-1-0 39.51	+10 26 25.9	- 8 44.7	9.563528	21 51	6 59
	20	1 37 43.17	0 47.34	10 18 48.4	7 37.5	9.570520	21 48	6 59
	21	1 38 38.13	0 54.96	10 12 17.1	6 31.3	9.577558	21 45	6 58
	22	I 39 40.50	I 2.37	10 6 50.7	5 26.4	9.584631	21 42	6 57
	23	I 40 50.05	1 9.55	10 2 27.6	4 23.1	9.591727	21 39	6 57
	0.4	T 40 6 FF	1-1 16.50	+ 9 59 6.2	3 21.4	0.508895	27.06	6
	24	1 42 6.55	1 23.23	. 2 32	2 21.4	9.598835	21 36	6 57
	25	1 43 29.78	1 29.74	9 56 44.8	1 23.4	9.605946	21 34	6 57
	26	1 44 59.52	1 36.01	9 55 21.4	0 27.2	9.613052	21 31	6 56
	27	1 46 35.53	I 42.07	9 54 54.2	+ 0 26.9	9.620144	21 29	6 56
	28	I 48 17.60	+1 47.92	9 55 21.1	+ 1 19.1	9.627216	21 27	6 56
	2 9	I 50 5.52	1 53.55	+ 9 56 40.2	2 9.2	9.634261	21 25	6 56
	30	1 51 59.07	1 58.97	9 58 49.4	2 57.2	9.641273	21 23	6 57
	31	1 53 58.04	2 4.20	10 1 46.6		9.6 482 48	21 21	6 57
Juni	1	I 56 2.24		10 5 29.8	3 43.2 4 27.2	9.655181	21 19	6 57
	2	1 58 11.48	2 9.24	10 9 57.0	4 2/.2	9.662068	21 17	6 58

o ^b Mittl.		AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Juni	ı	1 56 2.24	m #	+10° 5′ 29.8		9.655181	21 19 m	6 ^h 57 ^m
ouni	2,	1 58 11.48	+2 9.24	10 9 57.0	+ 4 27.2	9.662068	21 17	6 58
	3	2 0 25.57	2 14.09	10 15 6.2	5 9.2	9.668906	21 15	6 58
	4	2 2 44.33	2 18.76	10 20 55.3	5 49.1	9.675692	21 14	6 59
	5	2 5 7.60	2 23.27	10 27 22.4	6 27.1	9.682424	21 12	6 59
		, ,	+2 27.62	10 2/ 22.4	+ 7 3.2			
	6	2 7 35.22	2 31.81	+10 34 25.6	7 37-4	9.689100	21 11	7 0
	7	2 10 7.03	2 35.86	10 42 3.0	8 9.7	9.695717	21 9	7 1
	8	2 12 42.89	2 39.77	10 50 12.7	8 40.3	9.702275	21 8	7 I
	9	2 15 22.66	2 43.55	10 58 53.0	9 9.2	9.708772	21 7	7 2
	IO	2 18 6.21		11 8 2.2		9.715207	21 5	7 3
	11	2 20 53.44	+2 47.23	+11 17 38.7	+ 9 36.5	9.721581	21 4	7 4
	12	2 23 44.23	2 50.79	11 27 40.8	10 2.1	9.727892	21 3	7 5
	13	2 26 38.49	2 54.26	11 38 6.9	10 26.1	9.734139	21 2	7 6
	14	2 29 36.11	2 57.62	11 48 55.6	10 48.7	9.740322	21 I	7 7
	15	2 32 37.01	3 0.90	12 0 5.2	11 9.6	9.746442	21 0	7 8
			+3 4.10	,	+11 29.1			'
	16	2 35 41.11	3 7.21	+12 11 34.3	11 47.1	9.752498	20 59	7 9
	17	2 38 48.32	3 10.26	12 23 21.4	12 3.7	9.758489	20 58	7 10
	18	2 41 58.58	3 13.22	12 35 25.1	12 18.8	9.764416	20 58	7 12
	19	2 45 11.80	3 16.12	12 47 43.9	12 32.5	9.770278	20 57	7 13
	20	2 48 27.92	+3 18.96	13 0 16.4	+12 44.9	9.776076	20 56	7 14
	21	2 51 46.88	3 21.71	+13 13 1.3	12 55.8	9.781809	20 56	7 15
	22	2 55 8.59	3 24.41	13 25 57.1	13 5.4	9.787478	20 55	7 16
	23	2 58 33.00	3 27.06	13 39 2.5	13 13.8	9.793082	20 55	7 18
	24	3 2 0.06	3 29.64	13 52 16.3	13 20.8	9.798623	20 54	7 19
	25	3 5 29.70	1-3 32.17	14 5 37.1	+13 26.5	9.804100	20 54	7 20
	26	3 9 1.87		+14 19 3.6		9.809514	20 53	7 22
	27	3 12 36.52	3 34.65	14 32 34.6	13 31.0	9.814865	20 52	7 23
	28	3 16 13.60	3 37.08	14 46 8.9	13 34.3	9.820154	20 52	7 24
	29	3 19 53.05	3 39.45	14 59 45.2	13 36.3	9.825381	20 52	7 26
	30	3 23 34.82	3 41.77	15 13 22.3	13 37.1	9.830547	20 52	7 27
Juli	1	3 27 18.87	1-3 44.05	+15 26 59.0	+13 36.7	9.835652	20 52	7 29
oun	2	3 31 5.16	3 46.29	15 40 34.2	13 35.2	9.840697	20 52	7 30
	3	3 34 53.65	3 48.49	15 54 6.9	13 32.7	9.845683	20 51	7 31
		3 38 44.28	3 50.63	16 7 36.0	13 29.1	9.850611	20 51	7 33
	4	3 3	3 52.74		13 24.3	9.855481	_	
	5		+3 54.81		+13 18.5		,	
	6	3 46 31.83	3 56.85	+16 34 18.8	13 11.7	9.860295	20 51	7 35
	7	3 50 28.68	3 58.85	16 47 30.5	13 3.9	9.865052	20 51	7 37
	8	3 54 27.53	4 0.83	17 0 34.4	12 55.1	9.869755	20 51	7 38
	9	3 58 28.36	4 2.78	17 13 29.5	12 45.5	9.874404	20 51	7 40
	10	4 2 31.14		17 26 15.0		9.878999	20 51	7 41

Wahrer geozentrischer Ort.

o ^h Mittl.		AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Juli	0	3 58 28.36	m e	1 7 7 7 7 7 7		0 0 7 4 4 0 4	h m	h m
Jun	9		+4 2.78	+17 13 29 5	+12 45.5	9.874404	20 51	7 40
	10	4 2 31.14	4 4.70	17 26 15.0	12 34.9	9.878999	20 51	7 41
	II	4 6 35.84	4 6.59	17 38 49.9	12 23.4	9.883542	20 52	7 42
	12	4 10 42.43	4 8.46	17 51 13.3	12 10.9	9.888034	20 52	7 44
	13	4 14 50.89	+4 10.31	18 3 24.2	+11 57.6	9.892475	20 52	7 45
	14	4 19 1.20	4 12.13	+18 15 21.8	11 43.4	9.896865	20 52	7 46
	15	4 23 13.33	4 13.93	18 27 5.2	11 28.4	9.901206	20 52	7 47
	16	4 27 27.26	4 15.71	18 38 33.6	11 12.5	9.905498	20 53	7 49
	17	4 31 42.97		18 49 46.1		9.909742	20 53	7 50
	18	4 36 0.42	4 17.45	19 0 41.8	10 55.7	9.913938	20 53	7 51
			+4 19.17		+10 38.0	9.918087		
	19	4 40 19.59	4 20.86	+19 11 19.8	10 19.6		20 54	7 52
	20	4 44 40.45	4 22.52	19 21 39.4	10 0.4	9.922189	20 54	7 53
	21	4 49 2.97	4 24.14	19 31 39.8	9 40.3	9.926244	20 55	7 55
	22	4 53 27.11	4 25.74	19 41 20.1	9 19.5	9.930254	20 55	7 56
	23	4 57 52.85	+4 27.29	19 50 39.6	+ 8 58.0	9.934218	20 56	7 57
	24	5 2 20.14	4 28.81	+19 59 37.6	8 35.6	9.938137	20 56	7 58
	25	5 6 48.95	4 30.30	20 8 13.2	8 12.5	9.942012	20 57	7 59
	26	5 11 19.25	4 31.75	20 16 25.7	7 48.7	9.945843	20 57	8 0
	27	5 15 51.00		20 24 14.4		9.949631	20 58	8 I
	28	5 20 24.15	4 33.15	20 31 38.7	7 24.3	9.953376	20 58	8 r
	29	5 24 58.65		+20 38 37.8		9.957078	20 59	8 2
	30	5 29 34.47	4 35.82	20 45 11.1	6 33.3	9.960738	21 0	8 3
	31	5 34 11.57	4 37.10	20 51 18.0	6 6.9	9.964357	21 0	8 4
Aug.		5 38 49.90	4 38.33	20 56 58.0	5 40.0	9.967935	2I I	8 4
	2	5 43 29.41	4 39.51	21 2 10.4	5 12.4	9.971472	21 2	8 5
		0 (+4 40.65		+ 4 44.3			
	3	_	4 41.73	+21 6 54.7	4 15.7	9.974970	21 2	8 5 8 6
	4	5 52 51.79	4 42.76	21 11 10.4	3 46.6	9.978429	21 3	8 6
	5	5 57 34.55	4 43.76	21 14 57.0	3 17.0	9.981849	21 4	
	6	6 2 18.31	4 44.7I	21 18 14.0	2 47.0	9.985232	21 5	8 7
	7	6 7 3.02	+4 45.61	21 21 1.0	+ 2 16.6	9.988577	21 6	8 7
	8	6 11 48.63	4 46.47	+21 23 17.6	1 45.8	9.991886	21 6	8 7
	9	6 16 35.10	4 47.29	21 25 3.4	1 14.6	9.995159	21 7	8 8
	10	6 21 22.39	1	21 26 18.0		9.998396	21 8	8 8
	II	6 26 10.45	4 48.06	21 27 1.0	0 43.0	0.001598	21 9	8 8
	12	6 30 59.24	4 48.79	21 27 12.1	+ 0 11.1	0.004766	21 10	8 8
	13	6 35 48.71	-H-4 49-47	+21 26 51.1	- 0 21.0	0.007900	21 11	8 8
	14	6 40 38.82	4 50.11	21 25 57.6	0 53.5	0.011000	21 12	8 8
	15	6 45 29.52	4 50.70	21 24 31.4	1 26.2	0.014067	21 12	8 8
	16	6 50 20.77	4 51.25	21 22 32.2	1 59.2	0.017101	21 13	8 7
	17	6 55 12.51	4 51.74	21 19 59.7	2 32.5	0.020102	21 14	8 7
	-/	1 ~ 22 14.21	1	1 41 19 39./	1	0.040104	1 41 14	· /

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 16 17 18 19 20 21 22 23	6 50 20.77 6 55 12.51 7 0 4.71 7 4 57.32 7 9 50.28 7 14 43.54 7 19 37.05 7 24 30.78	+4 51.74 4 52.20 4 52.61 4 52.96 +4 53.26 4 53.51 4 53.73	+21° 22° 32.2° 21 19 59.7° 21 16 53.7° 21 13 14.2° 21 9 1.0° -+21 4 14.0° 20 58 53.1° 20 52 58.3°	- 2 32.5 3 6.0 3 39.5 4 13.2 - 4 47.0 5 20.9 5 54.8	0.017101 0.020102 0.023071 0.026008 0.028913 0.031787 0.034630 0.037442	21 13 21 14 21 15 21 16 21 17 21 18 21 19 21 20	8 ^h 7 ^m 8 7 8 7 8 6 8 6 8 5 8 5
24 25 26	7 29 24.68 7 34 18.69 7 39 12.77	4 53.90 4 54.01 1-4 54.08 4 54.10	20 46 29.5 20 39 26.7 1-20 31 49.9	6 28.8 7 2.8 - 7 36.8 8 10.7	0.040223 0.042973 0.045693	21 21 21 22 21 23	8 3 8 2 8 1
27 28 29 3°	7 44 6.87 7 49 0.95 7 53 54.96 7 58 48.85	4 54.08 4 54.01 4 53.89 +4 53.72	20 23 39.2 20 14 54.8 20 5 36.8 19 55 45.4	8 44.4 9 18.0 9 51.4 10 24.8	0.048383 0.051044 0.053675 0.056277	21 24 21 25 21 26 21 27	7 59 7 58 7 57
Sept. 1 2 3 4	8 3 42.57 8 8 36.10 8 13 29.39 8 18 22.40 8 23 15.10	4 53.53 4 53.29 4 53.01 4 52.70	19 45 20.6 19 34 22.6 19 22 51.7 19 10 48.2 18 58 12.4	10 58.0 11 30.9 12 3.5 12 35.8	0.058851 0.061396 0.063914 0.066404 0.068866	21 28 21 29 21 30 21 30 21 31	7 56 7 55 7 54 7 52 7 51
5 6 7 8	8 28 7.45 8 32 59.42 8 37 50.99 8 42 42.14	4 52.35 4 51.97 4 51.57 4 51.15 4 50.70	+ 18 45 4.6 18 31 25.0 18 17 13.9 18 2 31.7	-13 7.8 13 39.6 14 11.1 14 42.2 15 12.9	0.071302 0.073711 0.076094 0.078452	21 32 21 33 21 34 21 35	7 49 7 48 7 46 7 46
9 10 11 12	8 47 32.84 8 52 23.08 8 57 12.83 9 2 2.08	4 50.24 4 49.75 4 49.25 4 48.73	17 47 18.8 +17 31 35.5 17 15 22.3 16 58 39.5	-15 43.3 16 13.2 16 42.8 17 12.1	0.080785 0.083093 0.085376 0.087634	21 36 21 37 21 38 21 39	7 43 7 41 7 40 7 38
13 14 15 16	9 6 50.81 9 11 39.02 9 16 26.69 9 21 13.80	4 48.21 +4 47.67 4 47.11 4 46.55	16 41 27.4 16 23 46.5 +16 5 37.4 15 47 0.4	17 40.9 -18 9.1 18 37.0 19 4.4	0.089868 0.092079 0.094265 0.096428	21 39 21 40 21 41 21 42	7 36 7 34 7 33 7 31
17 18 19 20	9 26 0.35 9 30 46.34 9 35 31.76 9 40 16.60	4 45.99 4 45.42 1-4 44.84 4 44.26	15 27 56.0 15 8 24.8 14 48 27.3 +14 28 3.9	19 31.2 19 57.5 -20 23.4 20 48.8	0.098568 0.100684 0.102777 0.104847	21 43 21 44 21 45 21 45	7 29 7 27 7 25 7 23
21 22 23 24	9 45 0.86 9 49 44.55 9 54 27.65 9 59 10.18	4 43.69 4 43.10 4 42.53	14 7 15.1 13 46 1.6 13 24 23.9 13 2 22.5	21 13.5 21 37.7 22 1.4	0.106894 0.108918 0.110920 0.112899	21 46 21 47 21 48 21 48	7 21 7 18 7 16 7 14

o ^b Mi t tl.	Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Sant	22	9 54 27.65	m s	1 70 04 00 0		0.110000	21 48 m	7 16 m
Sept.			+4 42.53	+13 24 23.9	-22 I.4	0.110920		7 10
	24	9 59 10.18	4 41.96	13 2 22.5	22 24.4	0.112899	21 48	7 14
	25	10 3 52.14	4 41.38	12 39 58.1	22 46.8	0.114856	21 49	7 12
	2 6	10 8 33.52	4 40.81	12 17 11.3	23 8.6	0.116791	21 50	7 10
	27	10 13 14.33	+4 40.26	11 54 2.7	-23 29.8	0.118704	21 51	7 8
	2 8	10 17 54.59	4 39.71	+11 30 32.9	23 50.3	0.120595	21 51	7 5
	29	10 22 34.30	4 39.17	11 6 42.6	24 10.1	0.122464	21 52	7 3
	30	10 27 13.47	4 39.17	10 42 32.5	24 29.4	0.124312	21 53	7 x
Okt.	1	10 31 52.10		10 18 3.1		0.126138	21 54	6 58
	2	10 36 30.22	4 38.12	9 53 15.2	24 47.9	0.127943	21 54	6 56
	0		+4 37.61		-25 5.8		21 55	6 54
	3	. , ,	4 37.13		25 23.1	0.129728	77.	, , ,
	4	10 45 44.96	4 36.66	9 2 46.3	25 39.7	0.131492	21 56	6 52
	5	10 50 21.62	4 36.22	8 37 6.6	25 55.6	0.133236	21 56	6 49
	6	10 54 57.84	4 35.80	8 11 11.0	26 10.8	0.134961	21 57	6 47
	7	10 59 33.64	+-4 35.40	7 45 0.2	- 26 25.4	0.136666	21 58	6 44
	8	11 4 9.04		+ 7 18 34.8		0.138351	21 58	6 42
	9	11 8 44.06	4 35.02	6 51 55.4	26 39.4	0.140017	21 59	6 40
	IO	11 13 18.74	4 34.68	6 25 2.7	26 52.7	0.141664	22 0	6 37
	11	11 17 53.11	4 34.37	5 57 57.4	27 5-3	0.143292	22 0	6 35
	12	11 22 27.19	4 34.08	5 30 40.1	27 17.3	0.144902	22 I	6 33
	13	11 27 1.02	+4 33.83	+ 5 3 11.5	-27 28.6	0.146494	22 I	6 30
	14	11 31 34.62	4 33.60	4 35 32.3	27 39.2	0.148067	22 2	6 28
	15	11 36 8.03	4 33.41	4 7 43.2	27 49.1	0.149622	22 3	6 26
	16	11 40 41.27	4 33.24		27 58.3	0.151159		6 23
	17	11 45 41.27	4 33.11	3 39 44.9	28 6.8	0.152678	22 3	6 20
		., ,	+4 33.01		-28 14.7			
	18	11 49 47.39	4 32.95	+ 2 43 23.4	28 21.9	0.154179	22 4	6 18
	19	11 54 20.34	4 32.92	2 15 1.5	28 28.4	0.155662	22 5	6 15
	20	11 58 53.26	4 32.93	1 36 33.1	28 34.I	0.157128	22 6	6 12
	21	12 3 26.19	4 32.97	1 17 59.0	28 39.1	0.158576	22 6	6 10
	22	12 7 59.16		0 49 19.9		0.160006	22 7	6 8
	23	12 12 32.20	+4 33.04	+ 0 20 36.5	-28 43.4	0.161419	22 7	6 5
	24	12 17 5.34	4 33.14	- 0 8 10.4	28 46.9	0.162814	22 8	6 3
	25	12 21 38.61	4 33.27	0 37 0.2	28 49.8	0.164192	22 9	6 0
	2 6	12 26 12.06	4 33-45		28 51.8	0.165553		_
	27		4 33.66	1 5 52.0	28 53.1	0.166897		
		3 157	-1-4 33.90	1 34 45.1	-28 53.7		4	5 55
	28	12 35 19.62	4 34.18	— 2 3 38.8	28 53.5	0.168224	22 11	5 53
	29	12 39 53.80	4 34-49	2 32 32.3	28 52.4	0.169533	22 11	5 50
	30	12 44 28.29	4 34.82	3 I 24.7	28 50.6	0.170825	22 12	5 48
	31	12 49 3.11	4 35.20	3 30 15.3	28 48.1	0.172101	22 12	5 45
Nov.	I	12 53 38.31	7 33.20	3 59 3.4	20 4011	0.173361	22 13	5 43

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
01.	h m s		0 1 11			h m	h m
Okt. 31	12 49 3.11	+4 35.20	— 3 30 15.3	$-28^{'}48.1$	0.172101	22 12	5 45
Nov. 1	12 53 38.31	4 35.61	3 59 3.4	28 44.9	0.173361	22 13	5 43
2	12 58 13.92	4 36.05	4 27 48.3	28 40.9	0.174604	22 14	5 40
3	13 2 49.97	4 36.54	4 56 29.2	28 36.1	0.175832	22 14	5 38
4	13 7 26.51	+4 37.06	5 25 5.3	-28 30.5	0.177043	22 15	5 35
5	13 12 3.57	4 37.61	- 5 53 35.8	28 24.1	0.178239	22 15	5 33
6	13 16 41.18		6 21 59.9	28 17.1	0.179420	22 16	5 30
7	13 21 19.38	4 38.20	6 50 17.0		0.180585	22 17	5 28
8	13 25 58.21	4 38.83	7 18 26.3	28 9.3	0.181735	22 18	5 25
9	13 30 37.70	4 39.49	7 46 27.0	28 0.7	0.182871	22 19	5 23
		+4 40.20		-27 51.4			
10	13 35 17.90	4 40.93	- 8 14 18.4	27 41.3	0.183991	22 19	5 20
11	13 39 58.83	4 41 69	8 41 59.7	27 30.4	0.185097	22 20	5 18
12	13 44 40.52	4 42.50	9 9 30.1	27 18.7	0.186189	22 21	5 15
13	13 49 23.02	4 43.34	9 36 48.8	27 6.3	0.187266	22 22	5 13
14	13 54 6.36		10 3 55.1		0.188328	22 22	5 10
15	13 58 50.57	+4 44.21	-10 30 48.1	-26 53.0	0.189377	22 23	5 8
16	14 3 35.68	4 45.11	10 57 27.2	26 39.1	0.190411	22 24	5 5
17	14 8 21.72	4 46.04	11 23 51.5	26 24.3	0.191432	22 25	5 3
18	14 13 8.72	4 47.00	11 50 0.2	26 8.7	0.192438	22 26	5 0
19	14 17 56.71	4 47-99	12 15 52.5	25 52.3	0.193430	22 26	4 58
20	14 22 45.72	+4 49.01	—I2 4I 27.7	-25 35.2	0.194408	22 27	4 56
21	14 27 35.77	4 50.05	13 6 44.9	25 17.2	0.195373	22 28	4 53
22	14 32 26.89	4 51.12	13 31 43.3	24 58.4	0.196323	22 29	4 51
23	14 37 19.10	4 52.21	13 56 22.1	24 38.8	0.197259	22 30	4 48
24	14 42 12.41	4 53.31	14 20 40.4	24 18.3	0.198182	22 31	4 46
·		+4 54.42		-23 57.0			
25	14 47 6.83	4 55-55	-14 44 37·4	23 34.8	0.199090	22 32	4 44
26	14 52 2.38	4 56.70	15 8 12.2	23 12.0	0.199985	22 33	4 41
27	14 56 59.08	4 57.87	15 31 24.2	22 48.3	0.200866	22 34	4 39
28	15 1 56.95	4 59.03	15 54 12.5	22 23.8	0.201734	22 35	4 37
29	15 6 55.98	+5 0.21	16 16 36.3	-21 58.4	0.202588	22 36	4 35
30	15 11 56.19	_	-16 38 34.7		0.203429	22 37	4 32
Dez. 1	15 16 57.58	5 1.39	17 0 7.0	21 32.3	0.204256	22 38	4 30
2	15 22 0.16	5 2.58	17 21 12.4	21 5.4	0.205071	22 39	4 28
3	15 27 3.92	5 3.76	17 41 50.1	20 37.7	0.205873	22 40	4 26
4	15 32 8.86	5 4.94	18 1 59.3	20 9.2	0.206662	22 42	4 24
,	15 37 14.99	+5 6.13	-18 21 39.4	-19 40.1	0.207438	22 43	4 22
5 6		5 7-32		19 10.2	, ,,		
	15 42 22.31	5 8.50	18 40 49.6	18 39.4	0.208202		
7	15 47 30.81	5 9.67	18 59 29.0	18 7.9	0.208954		4 18
8	15 52 40.48	5 10.83	19 17 36.9	1/ 35.0	0.209694		4 16
9	15 57 51.31		19 35 12.7		0.210421	22 48	4 14

Wahrer	geozentrischer	Ort.
--------	----------------	------

o ^h Mittl. Zeit

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Jan. o	h m 8	m s	0 / "	, ,	0.381360	22 49 m	h m
van. o	17 27 24.18	+3 12.39	-23 41 I.4	-2 59.3	0.380698	1	3 45
2	17 30 36.57	3 12.72	23 44 0.7	2 44.8	0.380030	22 49	3 45
	17 33 49.29	3 13.05	23 46 45.5	2 30.2		22 47	3 45 3 44
3	17 37 2.34	3 13.36	23 49 15.7	2 15.5	0.379355	22 46	_
4	17 40 15.70	+3 13.65	23 51 31.2	-2 o.7	0.378675		3 44
5	17 43 29.35	3 13.93	-23 53 31.9	I 45.9	0.377989	22 46	3 44
6	17 46 43.28	3 14.19	23 55 17.8	1 31.0	0.377297	22 45	3 44
7	17 49 57.47	3 14.45	23 56 48.8	1 16.0	0.376599	22 44	3 43
8	17 53 11.92	3 14.68	23 58 4.8	I I.O	0.375896	22 44	3 43
9	17 56 26.60	1-3 14.89	23 59 5.8	-0 46.0	0.375187	22 43	3 43
10	17 59 41.49		-23 59 51.8		0.374472	22 42	3 43
11	18 2 56.59	3 15.10	24 0 22.6	0 30.8	0.373752	22 42	3 43
12	18 6 11.89	3 15.30	24 0 38.3	0 15.7	0.373027	22 41	3 43
13	18 9 27.36	3 15.47	24 0 38.7	-0 0.4	0.372297	22 40	3 43
14	18 12 42.99	3 15.63	24 0 23.9	+0 14.8	0.371562	22 39	3 43
15	18 15 58.77	+3 15.78	-23 59 53.9	- 1 -0 3 0.0	0.370821	22 39	3 43
16	18 19 14.68	3 15.91	23 59 8.5	0 45.4	0.370076	22 38	3 43
17	18 22 30.71	3 16.03	23 58 7.8	I 0.7	0.369326	22 37	3 43
18	18 25 46.85	3 16.14	23 56 51.7	1 16.1	0.368571	22 37	3 43
19	18 29 3.09	3 16.24	23 55 20.3	1 31.4	0.367812	22 36	3 44
		13 16.32		+1 46.7			
20	18 32 19.41	3 16.38	-23 53 33.6	2 2.1	0.367049	22 35	3 44
21	18 35 35.79	3 16.43	23 51 31.5	2 17.5	0.366281	22 35	3 44
22	18 38 52.22	3 16.48	23 49 14.0	2 32.8	0.365509	22 34	3 44
23	18 42 8.70	3 16.52	23 46 41.2	2 48.2	0.364733	22 33	3 45
24	18 45 25.22	1-3 16.55	23 43 53.0	1-3 3.5	0.363953	22 33	3 45
25	18 48 41.77	3 16.55	-23 40 49.5	3 18.9	0.363168	22 32	3 45
2 6	18 51 58.32	3 16.55	23 37 30.6	3 34.2	0.362380	22 31	3 46
27	18 55 14.87	3 16.53	23 33 56.4	3 49.6	0.361587	22 31	3 46
28	18 58 31.40	3 16.50	23 30 6.8	4 4.8	0.360790	22 30	3 47
29	19 1 47.90	+3 16.45	23 26 2.0	-4 20.1	0.359989	22 29	3 47
30	19 5 4.35		-23 21 41.9		0.359184	22 28	3 48
31	19 8 20.74	3 16.39	23 17 6.6	4 35.3	0.358374	22 28	3 48
Febr. 1	19 11 37.06	3 16.32	23 12 16.2	4 50.4	0.357561	22 27	3 49
2	19 14 53.29	3 16.23	23 7 10.6	5 5 6	0.356743	22 27	3 50
3	19 18 9.42	3 16.13	23 1 49.9	5 20.7	0.355922	22 26	3 50
4	19 21 25.42	-1-3 16.∞	-22 56 14.2	1-5 35.7	0.355096	22 25	3 51
5	19 24 41.29	3 15.87	22 50 23.6	5 50.6	0.354267	22 25	3 52
6	19 27 57.01	3 15.72	22 44 18.1	6 5.5	0.353433	22 24	3 52
7	19 31 12.58	3 15.57	22 37 57.8	6 20.3	0.352596	22 23	3 53
8	19 34 27.97	3 15.39	22 31 22.8	6 35.0	0.351756	22 23	3 54
0	1-7 34 -1.9/		1 ~~ 3- 44.0		0.331/30	1 ~~ ~5	0 04

		wanrer	geozentris	cher O	r t.		
o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
г.,	h m s _		a , #_			h m	h us
Febr. 7	19 31 12.58	+3 15.39	-22° 37' 57.8	+ 6 35.0	0.352596	22 23 m	3 53
8	19 34 27.97	3 15.20	22 31 22.8	6 49.7	0.351756	22 23	3 54
9	19 37 43.17	3 15.∞	22 24 33.1	7 4.2	0.350912	22 22	3 55
10	19 40 58.17	3 14.79	22 17 28.9	7 18.6	0.350064	22 21	3 55
II	19 44 12.96	+3 14.57	22 10 10.3	+ 7 33.0	0.349213	22 21	3 56
12	19 47 27.53		-22 2 37.3		0.348359	22 20	3 57
13	19 50 41.87	3 14-34	21 54 50.1	7 47.2	0.347502	22 19	3 58
14	19 53 55.97	3 14.10	21 46 48.7	8 1.4	0.346642	22 18	3 59
15	19 57 9.81	3 13.84	21 38 33.3	8 15.4	0.345778	22 18	4 0
16	20 0 23.39	3 13.58	21 30 3.9	8 29.4	0.344912	22 17	4 I
		+3 13.32		+ 8 43.2			•
17	20 3 36.71	3 13.04	2I 2I 20.7	8 56.9	0.344044	22 16	4 2
18	20 6 49.75	3 12.76	21 12 23.8	9 10.4	0.343173	22 16	4 3
19	20 10 2.51	3 12.48	21 3 13.4	9 24.0	0.342299	22 15	4 4
20	20 13 14.99	3 12.18	20 53 49.4	9 37-4	0.341423	22 14	4 5
2.1	20 16 27.17	+3 11.88	20 44 12.0	+ 9 50.7	0.340545	22 13	4 6
22	20 19 39.05	3 11.58	-20 34 21.3	10 3.8	0.339664	22 13	4 7
23	20 22 50.63	3 11.38	20 24 17.5	10 16.9	0.338781	22 12	4 8
24	20 26 1.91		20 14 0.6	· 1	0.337896	22 11	4 I O
25	20 29 12.87	3 10.96	20 3 30.9	10 29.7	0.337008	22 10	4 11
26	20 32 23.51	3 10.64	19 52 48.4	10 42.5	0.336118	22 10	4 12
27	20 35 33.82	+-3 10.31	-19 41 53.3	+10 55.1	0.335226	22 9	4 13
28	20 38 43.80	3 9.98	19 30 45.7	11 7.6	0.334331	22 8	4 14
März 1	20 41 53.44	3 9.64	19 19 25.8	11 19.9	0.333434	22 7	4 15
2	20 45 2.73	3 9.29	19 7 53.7	11 32.1	0.332534	22 7	4 17
3	20 48 11.67	3 8.94	18 56 9.5	11 44.2	0.331632	22 6	4 18
4	20 51 20.25	+3 8.58	—18 44 13. 5	+11 56.0	0.330727	22 5	4 19
		3 8.22	18 32 5.9	12 7.6			
5	20 54 28.47	3 7.85	, , , , ,	12 19.2	0.329820	22 4	4 21
	20 57 36.32	3 7.47	18 19 46.7 18 7 16.1	12 30.6	0.328911	22 3	4 22
7 8	21 0 43.79	3 7.10	4	12 41.7	0.328000	22 2	4 23
٥	21 3 50.89	+3 6.71	17 54 34.4	+12 52.7	0.327087	22 2	4 25
9	21 6 57.60	3 6.33	-17 41 41.7	13 3.6	0.326172	22 I	4 26
10	21 10 3.93	3 5.94	17 28 38.1	13 14.2	0.325255	22 0	4 27
11	21 13 9.87	3 5.55	17 15 23.9	13 24.7	0.324335	21 59	4 29
12	21 16 15.42	3 5.16	17 1 59.2	13 35.0	0.323414	21 58	4 30
13	21 19 20.58	+3 4.76	16 48 24.2	+13 45.1	0.322492	21 57	4 31
14	21 22 25.34		—16 34 39. 1		0.321568	21 57	4 33
15	21 25 29.71	3 4.37	16 20 44.1	13 55.0	0.320642	21 56	4 34
16	21 28 33.69	3 3.98	16 6 39.4	14 4.7	0.319715	21 55	4 36
17	21 31 37.28	3 3.59	15 52 25.0	14 14.4	0.318786	21 54	4 37
18	21 34 40.47	3 3.19	15 38 1.3	14 23.7	0.317857	21 53	4 39
	. JI T-17/	1	7 2 - ~ . 3	1	1 5-1-51	1 55	1 37

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März 17	h m s	m s	15 52 25.0	, ,	0.318786	2T 54	4 37
18	21"31"37.28	+3 3.19		+14 23.7	0.317857	21 54	
	21 34 40.47	3 2.80		14 33.0	0.31/05/	21 53	4 39
19	21 37 43.27	3 2.42	15 23 28.3 15 8 46.2	14 42.1		21 51	4 4º 4 4I
20	21 40 45.69	3 2.04		14 51.0	0.315994	21 50	
21	21 43 47.73	+3 1.66	14 53 55.2	+14 59.7	0.315061		4 43
22	21 46 49.39	3 1.28	—14 38 55.5	15 8.2	0.314127	21 49	4 44
23	21 49 50.67	3 0.92	14 23 47.3	15 16.6	0.313192	21 49	4 46
24	21 52 51.59	3 0.55	14 8 30.7	15 24.9	0.312256	21 48	4 47
25	21 55 52.14	3 0.18	13 53 5.8	15 32.9	0.311319	21 47	4 49
2 6	21 58 52.32	1-2 59.82	13 37 32.9	+15 40.8	0.310380	21 46	4 50
27	22 1 52.14		-13 21 52.1		0.309441	21 45	4 52
28	22 4 51.60	2 59.46	13 6 3.7	15 48.4	0.308500	21 44	4 53
29	22 7 50.71	2 59.11	12 50 7.8	15 55.9	0.307558	21 43	4 55
30	22 10 49.46	2 58.75	12 34 4.6	16 3.2	0.306614	21 42	4 56
31	22 13 47.86	2 58.40	12 17 54.4	16 10.2	0.305669	21 41	4 58
_		1-2 58.05		+16 17.1			
April 1	22 16 45.91	2 57.70	-12 1 37.3	16 23.8	0.304723	21 40	4 59
2	22 19 43.61	2 57.35	11 45 13.5	16 30.2	0.303775	21 39	5 I
3	22 22 40.96	2 57.00	11 28 43.3	16 36.4	0.302826	21 38	5 2
4	22 25 37.96	2 56.66	11 12 6.9	16 42.5	0.301876	21 37	5 4
5	22 28 34.62	+2 56.33	10 55 24.4	-1-16 48.4	0.300924	21 36	5 6
6	22 31 30.95	2 55.99	—10 38 36.0	16 54.0	0.299971	21 35	5 7
7	22 34 26.94	2 55.66	10 21 42.0	16 59.5	0.299017	21 34	5 9
8	22 37 22.60		10 4 42.5	17 4.7	o. 2 98061	21 33	5 10
9	22 40 17.93	2 55-33	9 47 37.8	17 9.8	0.297104	21 32	5 12
10	22 43 12.94	2 55.01	9 30 28.0		0.296146	21 31	5 13
11	22 46 7.63	+2 54.69	0 12 12 4	+17 14.6	0.295187	21 30	5 15
12	22 49 2.00	2 54.37	9 13 13.4 8 55 54.2	17 19.2	0.294227	21 29	5 16
13	22 51 56.06	2 54.06	8 38 30.6	17 23.6	0.293266	21 28	5 18
14	22 54 49.82	2 53.76	8 21 2.7	17 27.9	0.292304	21 27	5 20
		2 53.47		17 32.0	0.291341	21 26	5 21
15	22 57 43.29	1-2 53.19	, , , , , , , , , , , , , , , , , , ,	+17 35.9	0.491341	21 20	5 41
16	23 0 36.48	2 52.90	- 7 45 54.8	17 39.6	0.290378	21 25	5 23
17	23 3 29.38	2 52.63	7 28 15.2	17 43.1	0.289413	21 24	5 24
18	23 6 22.01	2 52.37	7 10 32.1	17 46.5	0.288448	21 23	5 26
19	23 9 14.38	2 52.12	6 52 45.6	17 49.7	0.287482	21 21	5 28
20	23 12 6.50	-+2 51.87	6 34 55.9		0.286516	21 20	5 29
21	23 14 58.37		- 6 17 3.2	+17 52.7	0.285548	21 19	5 31
22	23 17 50.00	2 51.63	5 59 7.6	17 55.6	0.284580	21 18	5 32
23	23 20 41.40	2 51.40	5 41 9.4	17 58.2	0.283611	21 17	5 34
24	23 23 32.57	2 51.17	5 23 8.7	18 0.7	0.282640	21 16	5 35
25	23 26 23.53	2 50.96	5 5 5 7	18 3.0	0.281668	21 15	5 37

Mittl.		AR.	Diff.	Dekl.	Diff.	${ m Log.} \ \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
A:1	١	h m	m s	0 1 0 1		0.0006.00	h m	h m
April		23 23 32.57	+2 50.96	-5 23 8.7	+18 3.0	0.282640	21 16	5 35
	25	23 26 23.53	2 50.74	5 5 5.7	18 5.1	0.281668	21 15	5 37
	2 6	23 29 14.27	2 50.54	4 47 0.6	18 7.0	0.280695	21 14	5 39
	27	23 32 4.81	2 50.34	4 28 53.6	18 8.7	0.279721	21 13	5 40
	28	23 34 55.15	+2 50.14	4 10 44.9	+18 10.2	0.278745	21 12	5 42
	29	23 37 45.29	2 49.95	-35234.7	18 11.6	0.277767	21 11	5 43
_111-11	30	23 40 35.24	2 49.77	3 34 23.1	18 12.6	0.276788	21 9	5 45
Mai	I	23 43 25.01	2 49.77	3 16 10.5	18 13.5	0.275807	21 8	5 47
	2	23 46 14.59		2 57 57.0		0.274824	21 7	5 48
	3	23 49 4.00	2 49.41	2 39 42.8	18 14.2	0.273840	21 6	5 50
		22 57 5221	+2 49.24		+18 14.8			
	4	23 51 53.24	2 49.08		18 15.0	0.272853	21 5	5 51
	5	23 54 42.32	2 48.91	2 3 13.0	18 15.1	0.271865	21 4	5 53
	6	23 57 31.23	2 48.76	I 44 57.9	18 15.1	0.270875	21 3	5 55
	7	0 0 19.99	2 48.61	1 26 42.8	18 14.8	0.269883	21 2	5 56
	8	0 3 8.60	4-2 48.46	1 8 28.0	+18 14.3	0.268889	21 0	5 58
	9	0 5 57.06	2 48.33	-0 50 13 .7	18 13.7	0.267894	20 59	5 59
	10	0 8 45.39		0 32 0.0		0.266896	20 58	6 I
	11	0 11 33.58	2 48.19	-0 13 47.1	18 12.9	0.265897	20 57	6 2
	12	0 14 21.64	2 48.06	+0 4 24.7	18 11.8	0.264896	20 56	6 4
	13	0 17 9.59	2 47.95	0 22 35.3	18 10.6	0.263893	20 55	6 6
	14	0 19 57.42	+2 47.83	+ 0 40 44.5	+18 9.2	0.262888	20 54	6 7
	15	0 22 45.15	2 47.73	0 58 52.2	18 7.7	0.261882	20 52.	6 9
	16	0 25 32.78	2 47.63	1 16 58.3	18 6.1	0.260873	20 51	6 10
	17	0 28 20.32	2 47.54	I 35 2.6	18 4.3	0.259863	20 50	6 12
	18		2 47.47	1 53 4.8	18 2.2	0.258851	20 49	
			1 2 47.40		+18 0.1			,
	19	0 33 55.19	2 47.33	+2 II 4.9	17 57.8	0.257837	20 48	6 15
	2 0	0 36 42.52	2 47.27	2 29 2.7	17 55.4	0.256821	20 47	6 17
	21	0 39 29.79	2 47.22	2 46 58.1	17 52.7	0.255802	20 46	6 18
	22	0 42 17.01	2 47.18	3 4 50.8	17 49.9	0.254781	20 44	6 20
	23	0 45 4.19	+2 47.15	3 22 40.7		0.253758	20 43	6 21
	24	0 47 51.34		+3 40 27.7	+17 47.0	0.252732	20 42	6 23
	25	0 50 38.46	2 47.12	3 58 11.6	17 43.9	0.251703	20 41	6 24
	2 6	0 53 25.54	2 47.08	4 15 52.1	17 40.5	0.250670	20 40	6 26
	27	0 56 12.60	2 47.06		17 37.1	0.249635	20 39	6 27
	28		2 47.04		17 33.4	0.248596	0,	, ,
			+2 47.02		+17 29.5		31	,
	29	I 1 46.66	2 47.01	+5 8 32.1	17 25.5	0.247554	20 36	6 31
	30	I 4 33.67	2 47.00	5 25 57.6	17 21.3	0.246509	20 35	6 32
т	31	I 7 20.67	2 47.00	5 43 18.9	17 17.0	0.245459	20 34	6 34
Juni	1	I 10 7.67	2 46.99	6 0 35.9	17 12.4	0.244406	20 33	6 35
	2	1 12 54.66	- 199	6 17 48.3	, , , , , ,	0.243350	20 32	6 37

o ^b Mittl.		AR.	Diff.	Dekl.	Diff.	$\text{Log.}\ \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Υ .		h m s		0 1 4			h m	b m
Juni	Ι	1 10 7.67	+2 46.99	+ 6 0 35.9	+17 12.4	0.244406	20 33 m	6 ^b 35 ^m
	2	1 12 54.66	2 46.98	6 17 48.3	17 7.8	0.243350	20 32	6 37
	3	I 15 41.64	2 46.98	6 34 56.1	17 2.8	0.242289	20 31	6 38
	4	1 18 28.62	2 46.99	6 51 58.9	16 57.7	0.241224	20 29	6 40
	5	1 21 15.61	-1-2 46.99	7 8 56.6	+16 52.5	0.240155	20 28	6 41
	6	1 24 2.60	2 46.99	+ 7 25 49.1	16 47.1	0.239082	20 27	6 43
	7	1 26 49.59	. , .	7 42 36.2		0.238005	20 26	6 44
	8	1 29 36.59	2 47.00	7 59 17.7	16 41.5	0.236924	20 25	6 46
	9	1 32 23.60	2 47.01	8 15 53.6	16 35.9	0.235839	20 24	6 47
	IO	1 35 10.62	2 47.02	8 32 23.6	16 30.0	0.234749	20 22	6 49
			+2 47.04	i	+16 24.1			
	11	1 37 57.66	2 47.06	+ 8 48 47.7	16 18.0	0.233655	20 21	6 50
	12	1 40 44.72	2 47.09	9 5 5.7	16 11.7	0.232557	20 20	6 52
	13	1 43 31.81	2 47.12	9 21 17.4	16 5.3	0.231455	20 19	6 53
	14	1 46 18.93	2 47.16	9 37 22.7	15 58.9	0.230348	20 18	6 55
	15	1 49 6.09	+2 47.19	9 53 21.6	+15 52.3	0.229237	20 17	6 56
	16	1 51 53.28	2 47.24	+10 9 13.9	15 45.5	0.228121	20 15	6 58
	17	I 54 40.52	2 47.29	10 24 59.4	15 38.7	0.227001	20 14	6 59
	18	1 57 27.81		10 40 38.1		0.225875	20 13	7 1
	19	2 0 15.15	2 47.34	10 56 9.8	15 31.7	0.224744	20 12	7 2
	2 0	2 3 2.54	2 47·39 +2 47·44	11 11 34.4	15 24.6 +15 17.3	0.223608	20 11	7 3
	21	2 5 49.98		+11 26 51.7		0.222467	20 10	7 4
	22	2 8 37.48	2 47.50	11 42 1.7	15 10.0	0.221320	20 9	7 6
	23	2 11 25.03	2 47.55 2 47.61	11 57 4.1	15 2.4	0.220166	20 7	7 8
	24	2 14 12.64		12 11 58.9	14 54.8	0.219007	20 6	7 9
	25	2 17 0.30	2 47 66	12 26 45.9	14 47.0	0.217841	20 5	7 11
	2 6	2 19 48.02	- -2 47.72	+12 41 24.9	+14 39.0	0.216669	20 4	7 12
	27	2 22 35.79	2 47.77	12 55 55.9	14 31.0	0.215490	20 3	7 13
	28	2 25 23.60	2 47.81	13 10 18.7	14 22.8	0.214304	20 2	7 15
	29	2 28 11.45	2 47.85	13 24 33.2	14 14.5	0.213111	20 0	7 16
	30	2 30 59.35	2 47.90	13 38 39.2	14 6.0	0.211911	19 59	7 18
Juli	•		+2 47.94		+13 57.5	,	1 - 3/	
Jun	Ι	2 33 47.29	2 47.97	+13 52 36.7	13 48.7	0.210704	19 58	7 19
	2	2 36 35.26	2 48.00	14 6 25.4	13 39.9	0.209489	19 57	7 20
	3	2 39 23.26	2 48.02	14 20 5.3	13 31.0	0.208266	19 56	7 22
	4	2 42 11.28	2 48.04	14 33 36.3	13 21.9	0.207036	19 55	7 23
	5	2 44 59.32	+2 48.05	14 46 58.2	+13 12.8	0.205798	19 54	7 24
	6	2 47 47.37	2 48.06	+15 0 11.0	13 3.5	0.204552	19 52	7 26
	7	2 50 35.43	2 48.06	15 13 14.5	12 54.1	0.203299	19 51	7 27
	8	2 53 23.49	2 48.07	15 26 8.6		0.202037	19 50	7 28
	9	2 56 11.56	2 48.07	15 38 53.3	12 44.7	0.200768	19 49	7 30
	10	2 58 59.63	2 40.07	15 51 28.5	12 35.2	0.199490	19 48	7 31

o ^b Mittl. 7	Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl, Stunden- Winkel	Halber Tag- bogen
Juli		2 ^h 56 ^m 11.56	m a	0 0	1 0	2 2 2 2 4 9	h m	h m
	9		+2 48.07	+15 38 53.3	+12 35.2	0.200768	19 49	7 30
	10	2 58 59.63	2 48.07	15 51 28.5	12 25.6	0.199490	19 48	7 31
	ΙΙ	3 I 47.70	2 48.06	16 3 54.1	12 15.9	0.198205	19 47	7 32
	12	3 4 35.76	2 48.05	16 16 10.0	12 6.2	0.196911	19 46	7 34
	13	3 7 23.81	+2 48.05	16 28 16.2	+11 56.4	0.195609	19 45	7 35
	14	3 10 11.86	2 48.05	+16 40 12.6	11 46.6	0.194 2 98	19 43	7 36
	15	3 12 59.91	2 48.03	16 51 59.2	11 36.6	0.192979	19 42	7 37
	16	3 15 47.94	2 48.00	17 3 35.8	11 26.6	0.191650	19 41	7 39
	17	3 18 35.94	2 47.98	17 15 2.4	11 16.6	0.190313	19 40	7 40
	18	3 21 23.92		17 26 19.0		0.188966	19 39	7 41
	19	3 24 11.88	+2 47.96	+17 37 25.5	4-11 6.5	0.187610	19 38	7 42
	2 0	3 26 59.80	2 47.92	17 48 21.8	10 56.3	0.186243	19 37	7 43
	21	3 29 47.69	2 47.89	17 59 7.9	10 46.1	0.184867	19 35	7 44
	22	3 32 35.53	2 47.84	18 9 43.7	10 35.8	0.183481	19 34	7 46
	23	3 35 23.31	2 47.78	18 20 9.0	10 25.3	0.182084	19 33	7 47
			+2 47.71		- 10 14.9			
	24	3 38 11.02	2 47.64	+18 30 23.9	10 4.4	0.180676	19 32	7 48
	25	3 40 58.66	2 47.56	18 40 28.3	9 53.8	0.179257	19 31	7 49
	2 6	3 43 46.22	2 47.46	18 50 22.1	9 43.2	0.177826	19 30	7 50
	27	3 46 33.68	2 47.35	19 0 5.3	9 32.6	0.176384	19 28	7 51
	28	3 49 21.03	1-2 47.24	19 9 37.9	+ 9 21.8	0.174931	19 27	7 52
	29	3 52 8.27	2 47.11	+19 18 59.7	9 11.1	0.173466	19 26	7 53
	30	3 54 55.38	2 46.96	19 28 10.8	9 0.3	0.171988	19 25	7 54
	31	3 57 42.34	2 46.80	19 37 11.1	8 49.5	0.170498	19 24	7 55
Aug.	1	4 0 29.14	2 46.62	19 46 0.6	8 38.7	0.168996	19 23	7 56
	2	4 3 15.76	+2 46.44	19 54 39.3	+ 8 27.8	0.167482	19 22	7 57
	3	4 6 2.20		+20 3 7.1		0.165954	19 20	7 58
	4	4 8 48.45	2 46.25	20 11 24.0	8 16.9	0.164414	19 19	7 59
	5	4 11 34.49	2 46.04	20 19 30.0	8 6.0	0.162861	19 18	8 0
	6	4 14 20.31	2 45.82	20 27 25.1	7 55.1	0.161296	19 17	8 I
	7	4 17 5.90	2 45.59	20 35 9.4	7 44-3	0.159717	19 16	8 2
	8	4 10 51 24	+2 45.34	120 42 42 8	+ 7 33.4	0.158126	10 11	8 3
		4 19 51.24	2 45.09	+20 42 42.8	7 22.6	0.156521	19 14	, ,
	9	4 22 36.33	2 44.84	20 50 5.4	7 11.8		19 13	
	10	4 25 21.17	2 44.57	20 57 17.2	7 1.0	0.154903	19 12	
	II	4 28 5.74	2 44.28	21 4 18.2	6 50.2	0.153272	19 11	8 5
	12	4 30 50.02	+2 43.99	21 11 8.4	+ 6 39.5	0.151627	19 10	
	13	4 33 34.01	2 43.70	+21 17 47.9	6 28.8	0.149968	19 8	8 7
	14	4 36 17.71	2 43.39	21 24 16.7	6 18.2	0.148295	19 7	8 8
	15	4 39 1.10	2 43.06	21 30 34.9	6 7.6	0.146607	19 6	8 8
	16	4 41 44.16	2 42.73	21 36 42.5	5 57.0	0.144905	19 5	8 9
	17	4 44 26.89	1 /3	21 42 39.5	3 3/-	0.143188	19 4	8 10

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 16	4 41 44.16	m 8	+21°36′42.5	4. 4	0.144905	19 5	8 ^h 9 ^m
17	4 44 26.89	-1-2 42.73	21 42 39.5	+5 57.0	0.143188	19 4	8 10
18	4 47 9.26	2 42.37	21 48 25.8	5 46.3	0.141456	19 2	8 10
19	4 49 51.27	2 42.01	21 54 1.6	5 35.8	0.139708	19 I	8 II
20	4 52 32.90	2 41.63	21 59 26.9	5 25.3	0.137944	19 0	8 12
21		-1·2 4I.24		+5 14.9	0.136165		8 12
22	4 55 14.14	2 40.83	+22 4 41.8 22 9 46.3	5 4.5	0.134369	18 59	8 13
	4 57 54.97 5 0 35.38	2 40,41		4 54.2		18 56	8 14
23 24	2 333	2 39.96	22 14 40.5	4 43.9	0.132557	18 55	
	5 3 15.34	2 39.49	22 19 24.4 22 23 58.0	4 33.6	0.130727		
25	5 5 54.83	+2 39.00		-F4 23.5	0.120001	33	,
26	5 8 33.83	2 38.51	+22 28 21.5	4 13.5	0.127017	18 52	8 15
27	5 11 12.34	2 38.00	22 32 35.0	4 3.4	0.125136	18 51	8 16
28	5 13 50.34	2 37.44	22 36 38.4	3 53.5	0.123236	18 50	8 16
29	5 16 27.78	2 36.87	22 40 31.9	3 43.6	0.121319	18 48	8 17
30	5 19 4.65	-+2 36.29	22 44 15.5	+3 34.0	0.119384	18 47	8 17
31	5 21 40.94		1-22 47 49.5		0.117430	18 46	8 18
Sept. 1	5 24 16.63	2 35.69	22 51 13.8	3 24.3	0.115458	18 44	8 18
2,	5 26 51.70	2 35.07	22 54 28.6	3 14.8	0.113468	18 43	8 19
3	5 29 26.12	2 34.42	22 57 34.1	3 5.5	0.111459	18 42	8 19
4	5 31 59.88	2 33.76	23 0 30.3	2 56.2	0.109431	18 40	8 19
r	5 34 32.97	1-2 33.09	+23 3 17.3	+2 47.0	0.107385	18 39	8 20
5 6		2 32.40		2 38.0	0.105320	18 37	8 20
7	5 37 5·37 5 39 37·07	2 31.70	23 5 55·3 23 8 24·5	2 29.2	0.1033237	18 36	8 20
8	5 42 8.05	2 30.98	23 10 45.0	2 20.5	0.101134	18 35	8 21
9	5 44 38.30	2 30.25	23 12 56.8	2 11.8	0.099012	18 33	8 21
-		1-2 29.50		+2 3.3		33	
10	5 47 7.80	2 28.74	+23 15 0.1	1 55.0	0.096871	18 32	8 21
II	5 49 36.54	2 27.95	23 16 55.1	1 46.9	0.094710	18 30	8 21
12	5 52 4.49	2 27.16	23 18 42.0	1 38.9	0.092529	18 29	8 22
13	5 54 31.65	2 26.34	23 20 20.9	1 30.9	0.090328	18 27	8 22
14	5 56 57.99	-F2 25.50	23 21 51.8	+1 23.1	0.088106	18 26	8 22
15	5 59 23.49	2 24.64	+23 23 14.9		0.085864	18 24	8 22
16	6 1 48.13	2 24.04	23 24 30.5	1 15.6	0.083600	18 23	8 22
17	6 4 11.91	2 22.89	23 25 38.6		0.081315	18 21	8 22
18	6 6 34.80	2 21.96	23 26 39.5	,	0.079009	18 20	8 23
19	6 8 56.76	1-2 21.02	23 27 33.4	0 53.9 +0 46.9	0.076681	18 18	8 23
20	6 11 17.78	2 20.07	+23 28 20.3	0 40.2	0.074331	18 16	8 23
21	6 13 37.85	2 19.08	23 29 0.5	0 33.7	0.071958	18 15	8 23
22	6 15 56.93	2 18.06	23 29 34.2	0 27.2	0.069563	18 13	8 23
23	6 18 14.99	2 17.03	23 30 1.4	0 21.1	0.067145	18 11	8 23
24	6 20 32.02	-,5	23 30 22.5		0.064704	18 10	8 23

		wanrer	geozentris	CHEL O	1 6.		
O ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. 2	Östl. Stunden- Winkel	Halber Tag- bogen
Sept. 23	6 18 14.99	m 8	+23 30 I.4	, ,	0.067145	18 11	8 23 m
24	6 20 32.02	+2 17.03		+0 21.1	0.064704	18 10	8 23
25	6 22 47.99	2 15.97	23 30 22.5	0 15.1	0.062240	18 8	8 23
2 6	6 25 2.86	2 14.87	23 30 37.0	0 9.3	0.059752	18 6	8 23
27	6 27 16.61	2 13.75	23 30 50.8	+0 3.9	0.057241	18 5	8 23
		+2 12.60	23 30 30.0	-o 1.5			,
28	6 29 29.21	2 11.43	+23 30 49.3	0 6.6	0.054706	18 3	8 23
29	6 31 40.64	2 10.22	23 30 42.7	0 11.4	0.052148	18 1	8 23
30	6 33 50.86	2 9.00	23 30 31.3	0 16.1	0.049567	17 59	8 23
Okt. 1	6 35 59.86	2 7.74	23 30 15.2	0 20.4	0.046962	17 58	8 23
2	6 38 7.60	F2 6.47	23 29 54.8	-0 24.6	0.044333	17 56	8 23
3	6 40 14.07		+23 29 30.2		0.041681	17 54	8 23
4	6 42 19.24	2 5.17	23 29 1.7	0 28.5	0.039006	17 52	8 23
5	6 44 23.09	2 3.85	23 28 29.5	0 32.2	0.036308	17 50	8 23
6	6 46 25.60	2 2.51	23 27 53.9	0 35.6	0.033586	17 48	8 23
7	6 48 26.74		23 27 15.1	0 38.8	0.030841	17 46	8 23
8		- f -1 59.76	1 22 26 22 4	-0 41.7	0.028073	77 45	_
	6 50 2 6.50 6 5 2 2 4.85	1 58.35	+23 26 33.4	0 44-4	0.025281	17 45 17 43	8 23 8 22
9 10		1 56.92	23 25 49.0	0 46.9	0.023261	, ,	8 22
10	6 54 21.77 6 56 17.23	1 55.46	23 25 2.1	0 49.0	0.019627	17 41	8 22
12	6 58 11.19	1 53.96	23 24 13.1	0 51.0	0.019027	17 39 17 37	8 22
12	0 50 11.19	-1-1 52.44	23 23 22.1	-o 52.8			
13	7 0 3.63	1 50.90	+23 22 29.3	0 54.2	0.013878	17 34	8 22
14	7 I 54.53	1 49.33	23 21 35.1	0 55.3	0.010968	17 32	8 22
15	7 3 43.86	I 47.73	23 20 39.8	o 56.1	0.008034	17 30	8 22
16	7 5 31.59	1 46.08	23 19 43.7	0 56.7	0.005076	17 28	8 22
17	7 7 17.67	1 44.41	23 18 47.0	-o 57.1	0.002094	17 26	8 22
18	7 9 2.08		+23 17 49.9		9.999089	17 24	8 21
19	7 10 44.79	1 42.71	23 16 52.7	0 57.2	9.996059	17 21	8 21
20	7 12 25.75	1 40.96	23 15 55.8	0 56.9	9.993006	17 19	8 21
21	7 14 4.92	1 39.17	23 14 59.5	0 56.3	9.989929	17 17	8 21
22	7 15 42.26	1 37.34	23 14 4.0	0 55.5	9.986829	17 15	8 21
22	H TH THHA	+1 35.48	122 12 07	O 54-3	9.983706	17 12	8 21
23 24	7 17 17.74 7 18 51.31	1 33.57	-+23 13 9.7 23 12 16.8	0 52.9	9.980560	17 10	8 21
		1 31.61	_	0 51.1		17 7	8 21
25 26	7 20 22.92	1 29.61	23 11 25.7	0 48.9	9.977391		8 21
20 27	7 21 52.53	1 27.57	23 10 36.8 23 9 50.4	. 0 46.4	9.974 2 00 9.970987	17 5	8 20
	, ,	-1-I 25.49		-o 43·7			
28	7 24 45.59	1 23.36	+23 9 6.7	0 40.6	9.967753	17 0	8 20
29	7 26 8.95	1 21.19	23 8 26.1	0 37.2	9.964499	16 57	8 20
30	7 27 30.14	1 18.99	23 7 48.9	0 33.5	9.961225	16 55	8 20
NI 31	7 28 49.13	1 16.73	23 7 15.4	0 29.5	9.957933	16 52	8 20
Nov. I	7 30 5.86	, ,	23 6 45.9	, ,	9.954623	16 49	8 20

o ^b Mittl.		AR.	Diff.	Dekl.	Diff.	${\rm Log.} \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
OLA		7 28 49.13		0 1 1			16 ^h 52 ^m	8 20 m
Okt.	31		1-1 16.73	+23 7 15.4	-0 29.5	9.957933		
Nov.	1	7 30 5.86	1 14.44	23 6 45.9	0 25.1	9.954623	16 49	8 20
	2	7 31 20.30	1 12.11	23 6 20.8	0 20.4	9.951295	16 47	8 20
	3	7 32 32.41	1 9.75	23 6 0.4	0 15.5	9.947951	16 44	8 20
	4	7 33 42.16	+1 7.34	23 5 44·9	-0 10.4	9.944592	16 41	8 20
	5	7 34 49.50	1 4.89	+23 5 34.5	-0 4.9	9.941218	16 39	8 20
	6	7 35 54.39	1 2.40	23 5 29.6	+0 0.9	9.937830	16 36	8 20
	7	7 36 56.79	0 59.87	23 5 30.5	0 7.0	9.934429	16 33	8 20
	8	7 37 56.66	0 57.28	23 5 37.5	'	9.931016	16 30	8 20
	9	7 38 53.94	_	23 5 50.9	0 13.4	9.927592	16 27	8 20
	10	0.6	+0 54.66	+23 6 10.8	+0 19.9		16 24	8 20
			0 51.98		0 26.8	9.924159	16 21	8 20
	11	7 40 40.58	0 49.25	23 6 37.6	0 33.9	9.920717	16 18	8 20
	12	7 41 29.83	0 46.48	23 7 11.5	0 41.3	9.917267		8 20
	13	7 42 16.31	0 43.65	23 7 52.8	0 48.9	9.913811	16 14	
	14	7 42 59.96	+0 40.78	23 8 41.7	+0 56.9	9.910350	16 11	8 20
	15	7 43 40.74	0 37.84	+23 9 38.6	1 5.1	9.906886	16 8	8 20
	16	7 44 18.58	0 34.85	23 10 43.7	1 13.5	9.903420	16 5	8 21
	17	7 44 53.43	0 31.80	23 11 57.2	I 22.I	9.899954	16 1	8 21
	18	7 45 25.23	0 28.70	23 13 19.3	1 30.9	9.896489	15 58	8 21
	19	7 45 53.93	+0 25.54	23 14 50.2	+1 40.0	9.893028	15 54	8 21
	20	7 46 19.47	0 22.32	+23 16 30.2	1 49.2	9.889572	15 51	8 21
	21	7 46 41.79	0 19.05	23 18 19.4	1 58.7	9.886124	15 47	8 22
	22	7 47 0.84	0 15.72	23 20 18.1	2 8.2	9.882687	15 44	8 22
	23	7 47 16.56	0 12.33	23 22 26.3	2 17.9	9.879263	15 40	8 22
	24	7 47 28.89		23 24 44.2		9.875854	15 36	8 22
	25	7 47 37.80	+0 8.91	+23 27 11.9	+2 27.7	9.872464	15 32	8 23
	26	7 47 43.23	0 5.43	23 29 49.6	2 37.7	9.869096	15 28	8 23
	27	7 47 45.15	+0 1.92	23 32 37.2	2 47.0	9.865752	15 25	8 23
	28	7 47 43.52	-o 1.63	23 35 34.7	2 57.5	9.862437	15 21	8 24
	29	7 47 38.31	0 5.21	23 38 42.0	3 /-3	9.859153	15 17	8 24
			-o 8.82		+3 17.1			
Dez.	30	7 47 29.49	0 12.45	+23 41 59.1	1 40.0	9.855905	15 13	1
Dez.	1	7 47 17.04	0 16.11	23 45 25.9	3 30.3	9.852696	15 8	1 _
	2	7 47 0.93	0 19.77	23 49 2.2	3 45.7	9.849529	15 4	8 25
	3	7 46 41.16	0 23.45	23 52 47.9	3 54.0	9.846408	15 0	
	4	7 46 17.71	-0 27.13	23 56 42.7	+4 3.8	9.843337	14 55	8 26
	5	7 45 50.58	0 30.81	+24 0 46.5	4 12 4	9.840319	14 51	8 27
	6	7 45 19.77	0 34.50	24 4 58.9	4 20.6	9.837359	14 47	8 28
	7	7 44 45.27	0 34.30	24 9 19.5	4 28 6	9.834460	14 42	8 28
	8	7 44 7.10	0 41.83	24 13 48.1	4 36.1	9.831626	14 38	8 29
	9	7 43 25.27	4	24 18 24.2	4 30.1	9.828862	14 33	8 29

o" Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	$Log. \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Dez. 8 9 10 11 12 13 14 15 16 17 18	7 44 7.10 7 43 25.27 7 42 39.79 7 41 50.69 7 40 58.01 7 40 1.78 7 39 2.05 7 37 58.87 7 36 52.29 7 35 42.38 7 34 29.22	-0 41.83 0 45.48 0 49.10 0 52.68 -0 56.23 0 59.73 1 3.18 1 6.58 1 9.91 -1 13.16 1 16.32	+24°13′48″.1 24 18 24.2 24 23 7.5 24 27 57.4 24 32 53.4 +24 37 55.0 24 43 1.5 24 48 12.5 24 53 27.4 24 58 45.5 +25 4 5.9	+4 36.1 4 43.3 4 49.9 4 56.0 +5 1.6 5 6.5 5 11.0 5 14.9 5 18.1 +5 20.4 5 22.1	9.831626 9.828862 9.826172 9.823560 9.821030 9.818586 9.816232 9.813974 9.81815 9.809759 9.807811	14 38 14 33 14 28 14 24 14 19 14 14 14 19 14 4 13 59 13 54 13 49	8 29 8 30 8 31 8 32 8 33 8 34 8 35 8 35
19 20 21 22	7 33 12.90 7 31 53.53 7 30 31.22 7 29 6.08	1 19.37 1 22.31 1 25.14 -1 27.82	25 9 28.0 25 14 51.2 25 20 14.7 25 25 37.6	5 23.2 5 23.5 5 22.9 +5 21.5	9.805976 9.804257 9.802660 9.801188	13 43 13 38 13 33 13 28	8 36 8 37 8 38 8 38
23 24 25 26 27	7 27 38.26 7 26 7.91 7 24 35.19 7 23 0.26 7 21 23.32	1 30.35 1 32.72 1 34.93 1 36.94 -1 38.75	+25 30 59.1 25 36 18.5 25 41 34.9 25 46 47.5 25 51 55.4	5 19.4 5 16.4 5 12.6 5 7.9	9.799844 9.798633 9.797559 9.796625 9.795834	13 22 13 17 13 11 13 6 13 0	8 39 8 40 8 41 8 41 8 42
28 29 30 31 32	7 19 44.57 7 18 4.21 7 16 22.44 7 14 39.48 7 12 55.55	1 40.36 1 41.77 1 42.96 1 43.93 -1 44.69	+25 56 57.9 26 1 54.2 26 6 43.5 26 11 25.2 26 15 58.6	4 56.3 4 49.3 4 41.7 4 33.4 +4 24.5	9.795189 9.794692 9.794345 9.794149 9.794105	12 54 12 49 12 43 12 38 12 32	8 43 8 44 8 44 8 45 8 46
33	7 11 10.86		+26 20 23.I		9.794214	12 26	8 46

Wahrer geozentrischer Ort.

o ^h Mittl.		AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Jan.	0	17 57 42.16	m s	-23 13 24.0	(2. ii)	0.794006	23 20 m	3 49 m
	2,	17 59 40.80	+1 58.64	23 13 38.0	-0 14.0	0.793537	23 14	3 49
	4	18 1 39.16	1 58,36	23 13 46.4	0 8.4	0.793008	23 8	3 49
	6	18 3 37.15	1 57.99	23 13 49.0	-0 2.6	0.792418	23 2	3 49
	8	18 5 34.72	1 57.57	23 13 46.3	+0 2.7	0.791768	22 56	3 49
	т.		+1 57.11		+0 8.4	0.791058		
	10	1 3 3	1 56.59	-23 13 37.9	0 13.9		22 50	3 49
			1 56.01	23 13 24.0	0 19.1	0.790288	22 44	3 49
	14	1 13	1 55.37	23 13 4.9	0 24.4	0.789459	22 38	3 49
	16 18	18 13 19.80	1 54.69	23 12 40.5	0 29.5	0.788570	22 32	3 49
	10	18 15 14.49	+1 53.97	23 12 11.0	+0 34.4	0.787621	22 26	3 49
	20	18 17 8.46	1 53.19	-23 11 36.6		0.786617	22 20	3 49
	22	18 19 1.65	1 52.38	23 10 57.4	0 39.2	0.785553	22 14	3 49
	24	18 20 54.03		23 10 13.5	0 43.9 0 48.6	0.784431	22 8	3 49
	26	18 22 45.54	1 51.51	23 9 24.9		0.783252	22 2	3 49
	2 8	18 24 36.14	-	23 8 31.9	0 53.0	0.782015	21 56	3 49
	30	18 26 25.76	-1-1 49.62		+0 57-3	0.780721	21 50	
Febr.		18 28 14.36	1 48.60		1 1.3	, ,	_	3 49
T COI.			1 47.51	23 6 33.3 23 5 28.0	1 5.3	0.779370	21 44	3 50
	3	,	1 46.38	, ,	1 9.1	0.777962	21 38	3 50
	5 7	J . J	1 45.18		1 12.9	0.776498	21 32	3 50
	/	18 33 33.43	1-1 43.92	23 3 6.0	+1 16.1	0.774978	21 20	3 50
	9	18 35 17.35	1 42.60	-23 I 49.9	1 19.2	0.773403	21 20	3 50
	11	18 36 59.95	I 41.23	23 0 30.7	I 22.0	0.771773	21 13	3 50
	13	18 38 41.18	1 39.80	22 59 8.7	1 24.8	0.770090	21 7	3 50
	15	18 40 20.98	1 38.33	22 57 43.9	1 27.2	0.768354	2I I	3 51
	17	18 41 59.31		22 56 16.7		0.766566	20 55	3 51
	19	18 43 36.11	1-1 36.80	-22 54 47.2	-l-1 29.5	0.764727	20 48	3 51
	21	18 45 11.34	1 35.23	22 53 15.8	1 31.4	0.762837	20 42	3 51
	23	18 46 44.97	1 33.63	22 51 42.7	1 33.1	0.760897	20 36	3 51
	25	18 48 16.92	1 31 95	22 50 8.0	r 34.7	0.758908	20 29	3 52
	27	18 49 47.14	1 30.22	22 48 32.0	1 36.0	0.756870	20 23	3 52
3.5	,	12 17 7	-J-1 28.45		-1-x 37.0		20 23	
März	1	18 51 15.59	1 26.60	-22 46 55.0	1 37.7	0.754785	20 17	3 52
	3	18 52 42.19	1 24.69	22 45 17.3	1 38.2	0.752652	20 10	3 52
	5	18 54 6.88	1 22.71	22 43 39.1	1 38.4	0.750474	20 4	3 52
	7	18 55 29.59	1 20.68	22 42 0.7	1 38.3	0.748250	19 57	3 53
	9	18 56 50.27	·1·1 18.60	22 40 22.4	1-1 37.9	0.745983	19 51	3 53
	11	18 58 8.87		-22 38 44.5		0.743673	19 44	3 53
	13	18 59 25.33	1 16.46	22 37 7.2	1 37.3	0.741324	19 38	3 53
	15	19 0 39.59	1 14.26	22 35 31.0	1 36.2	0.738935	19 31	3 53
	17	19 1 51.60	I 12.01	22 33 56.0	1 35.0	0.736508	19 24	3 54
	19	19 3 1.31	1 9.71	22 32 22.5	1 33.5	0.734045	19 17	3 54
	-7	1 2 3 4.31		1 33		1 21/242	1 -9 -/	5 34

o ^b Mittl. Z	Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März	T /7	19 i 51.60	m e	—22 33 56.0	, ,	0.736508	l n m	3 54 ni
	19		+1 9.71		+1 33.5		19 17	
	21	19 3 1.31	1 7.38	2	1 31.7	0.734045	19 17	3 54
		1	I 4.99	, ,	1 29.7			3 54
	23 25	19 5 13.68	1 2.55	,	I 27.3	0.729017	1 2 '	3 54
	4 0		+1 0.06	22 27 53.8	+1 24.8	, , , , , ,	18 57	3 54
	27	19 7 16.29	0 57.51	-22 26 29.0	I 22.0	0.723863	18 50	3 54
	2 9	19 8 13.80	0 54.90	22 25 7.0	1 18.8	0.721242	18 43	3 55
	31	19 9 8.70	0 52.22	22 23 48.2	1 15.4	0.718595	18 36	3 55
April	2	19 10 0.92	0 49.48	22 22 32.8	1 11.8	0.715923	18 29	3 55
	4	19 10 50.40		22 21 21.0		0.713228	18 22	3 55
	6	19 11 37.12	1-0 46.72	-22 20 13.1	11 7.9	0.710514	18 15	3 55
	8	19 12 21.01	0 43.89	22 19 9.4	1 3.7	0.707782	18 8	3 55
	10	19 13 2.02	0 41.01	22 18 10.1	0 59.3	0.705036	18 1	3 55
	12	19 13 40.12	0 38.10	22 17 15.5	0 54.6	0.702277	17 53	3 56
	14	19 14 15.26	0 35.14	22 16 25.7	0 49.8	0.699509	17 46	3 56
	·		+0 32.15		+0 44.7			
	16	19 14 47.41	0 29.14	-22 15 41.0	0 39.6	0.696735	17 39	3 56
	18	19 15 16.55	0 26.10	22 15 1.4	0 34.2	0.693957	17 31	3 56
	20	19 15 42.65	0 23.02	22 14 27.2	0 28.7	0.691178	17 24	3 56
	22	19 16 5.67	0 19.90	22 13 58.5	0 23.0	0.688400	17 16	3 56
	24	19 16 25.57	+0 16.75	22 13 35.5	+0 17.2	0.685627	17 9	3 56
	2 6	19 16 42.32		-22 13 18.3		0.682861	17 I	3 56
-	28	19 16 55.90	0 13.58	22 13 6.9	0 11.4	0.680106	16 54	3 56
	30	19 17 6.27	0 10.37	22 13 1.5	+0 5.4	0.677365	16 46	3 56
Mai	2	19 17 13.40	0 7.13	22 13 2.2	-0 0.7	0.674642	16 38	3 56
	4	19 17 17.29	0 3.89	22 13 9.1	0 6.9	0.671942	r6 30	3 56
	6	10 17 17 02	+0 0.63	22 12 22 2	0 13.1	0.669268	16 23	
	8	19 17 17.92	-o 2.62	-22 I3 22.2	0 19.2	0.666623		
	10	19 17 15.30	0 5.87	22 13 41.4	0 25.5			
	10	19 17 9.43	0 9.10	22 14 6.9	0 31.6	0.6614012	1 '	3 56
		19 17 0.33	0 12.31	22 14 38.5	0 37.7	0.661439	15 59	3 56
	14	19 16 48.02	-0 15.48	22 15 16.2	-0 43.7	0.658909	15 50	3 56
	16	19 16 32.54	0 18.63	-22 15 59.9	0 49.4	0.656424	15 42	3 56
	18	19 16 13.91	0 21.74	22 16 49.3	0 55.1	0.653989	15 34	3 56
	20	19 15 52.17	0 24.81	22 17 44.4	1 0.6	0.651608	15 26	3 55
	22	19 15 27.36	0 27.84	22 18 45.0	1 6.0	0.649284	15 18	3 55
	24	19 14 59.52		22 19 51.0		0.647022	15 9	3 55
	26	19 14 28.69	-0 30.83	-22 21 2.1	-1 11.1	0.644826	15 1	3 55
	28	19 14 20.09	0 33.75	22 22 18.1	1 16.0	0.642700	14 52	3 55
	30	19 13 18.32	0 36.62	22 23 38.8	I 20.7	0.640649	14 44	3 55
Juni	3°	19 13 18.32	0 39-39	22 25 3.9	1 25.1	0.638676	14 35	0 00
o um	3	19 11 56.84	0 42.09	22 26 33.1	1 29.2	0.636786	14 35	
	3	119 11 50.04		44 40 33.1		0.030700	14 4/	3 54

o ^b Mittl. 2	Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber 'Tag- bogen
Juni	I	19 12 38.93	m s	22 25 3.9	, ,	0.638676	14 35	3 55 m
	3	19 11 56.84	0 42.09	22 26 33.1	-1 29.2	0.636786	14 27	3 54
	5	19 11 12.15	0 44.69	22 28 6.3	I 33.2	0.634983	14 18	3 54
	7	19 10 24.97	0 47.18	22 29 43.0	1 36.7	0.633271	14 9	3 54
	9	19 9 35.44	○ 49.53	22 31 22.9	1 39.9	0.631654	14 1	3 54
	-		-0 51.75		-I 42.7			
	11	19 8 43.69	0 53.84	22 33 5.6	1 45.1	0.630136	13 52	3 54
	13	19 7 49.85	0 55.77	22 34 50.7	I 47.0	0.628719	13 43	3 53
	15	19 6 54.08	0 57.58	22 36 37.7	1 48.6	0.627406	13 34	3 53
	17	19 5 56.50	0 59.23	22 38 26.3	1 49.9	0.626201	13 26	3 53
	19	19 4 57.27	-I 0.74	22 40 16.2	-1 50.9	0.625105	13 17	3 53
	21	19 3 56.53		-22 42 7.I		0.624122	13 8	3 53
	23	19 2 54.43	I 2.IO	22 43 58.5	1 51.4	0.623253	12 59	3 52
	25	19 1 51.15	1 3.28	22 45 50.1	1 51.6	0.622501	12 50	3 52
	27	19 0 46.86	I 4.29	22 47 41.5	1 51.4	0.621867	12 41	3 52
	29	18 59 41.73	1 5.13	22 49 32.5	1 51.0	0.621354	12 32	3 52
Juli	I		-ı 5.8o		-1 50.1			
e) tin		18 58 35.93 18 57 29.68	1 6.25	-22 51 22.6	1 49.0	0.620962	12 23	3 51
	3		1 6.50	22 53 11.6	1 47.6	0.620693	12 14	3 51
	5	18 56 23.18 18 55 16.61	1 6.57	22 54 59.2	1 45.8	0.620548	12 5	3 51
	7		1 6.43	22 56 45.0	I 43.7	0.620527	11 56	3 51
	9	٠,	-т 6.10	22 58 28.7	-1 41.6	0.620630	11 47	3 51
	11	18 53 4.08	I 5.55	-23 0 10.3	1 39.0	0.620856	11 38	3 50
	13	18 51 58.53	I 4.85	23 I 49.3	1 36.2	0.621204	11 29	3 50
	15	18 50 53.68	I 3.97	23 3 25.5	I 33.2	0.621672	11 20	3 50
	17	18 49 49.71	1 2.91	23 4 58.7	1 30.2	0.622259	II II	3 50
	19	18 48 46.80		23 6 28.9		0.622964	II 2	3 50
	21	18 47 45.12		-23 7 55.9	-1 27.0	0.623785	10 53	3 49
	23	18 46 44.83	1 0.29	23 9 19.7	1 23.8	0.624720	10 44	3 49
	25	18 45 46.10	0 58.73	23 10 40.1	1 20.4	0.625767	10 36	3 49
	27	18 44 49.08	0 57.02	23 11 57.2	1 17.1	0.626922	10 27	3 49
	2 9	18 43 53.94	0 55.14	23 13 10.8	1 13.6	0.628184	10 18	3 49
			-0 53.11		-1 10.0			
A	31	18 43 0.83	0 50.92	-23 14 20.8	1 6.5	0.629550	10 9	3 49
Aug.	2	18 42 9.91	0 48.61	23 15 27.3	1 2.9	0.631017	10 0	3 49
	4	18 41 21.30	0 40.14	23 16 30.2	0 59.4	0.632580	9 52	3 48
	6	18 40 35.16	0 43.56	23 17 29.6	0 55.8	0.634237	9 43	3 48
	8	18 39 51.60	-0 40.86	23 18 25.4	-o 52.3	0.635982	9 34	3 48
	10	18 39 10.74		-23 19 17.7	0 48.8	0.637813	9 26	3 48
	12	18 38 32.64	0 30.10	23 20 6.5		0.639723	9 17	3 48
	14	18 37 57.41	0 35.23	23 20 51.9	0 45-4	0.641710	9 9	3 48
	16	18 37 25.10	32.31	23 21 33.9	0 42.0	0.643770	9 0	3 48
	18	18 36 55.79	0 29.31	23 22 12.6	0 38.7	0.645898	8 52	3 48

O ^h Mittl. Zei	A R	. Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
	oh m	s	0 1 11			h m	h m
Aug. 16		25.10 m s	23 21 33.9	-0 38.7	0.643770	9 0	3 48 m
18	18 36 5	55.79 0 26.2	1 22 22 T2 (0 35.4	0.645898	8 52	3 48
20		29.54	23 22 48.0	0 32.2	0.648091	8 44	3 48
22	18 36	6.41 0 19.9	22 22 20.3	0 29.1	0.650344	8 36	3 48
2,4	18 35 4	16.45 -0 16. ₇	23 23 49.3	3 -0 26.0	0.652653	8 27	3 48
2.6	18 35 2	20.70	-23 24 15.3	2	0.655015	8 19	3 47
28	18 35 1	6.21 0 13.4	22 24 28.3	. 0 22.9	0.657425	8 11	3 47
30		6.02	22 21 580	0 19.0	0.659880	8 3	3 47
Sept. 1	1 0	0.14	22 25 14.0	0 10.9	0.662376	7 55	3 47
1 3	1 2 3 . 7		23 25 28.		0.664907	7 47	3 47
		-o o.r	8	-0 10.8			
5			$8 - 23 \ 25 \ 39.5$		0.667470	7 39	3 47
7	1 2 3 , 3	0 0.5	23 25 47.3	0 4./	0.670060	7 31	3 47
9	1 0	5.13 0 9.8	4 23 25 52.0	-0 1.7	0.672674	7 24	3 47
11			23 25 53.7	T-0 1	0.675308	7 16	3 47
13	18 35 2	28.10 +0 16.4	23 25 52.	0 4.4	0.677958	7 8	3 47
19	18 35 4	4.50 0 19.6	1-22 25 486	0 7.4	0.680621	7 I	3 47
17	18 36	4.14 0 22.8	22 25 40 6	0 10.5	0.683294	6 53	3 47
19	18 36 2	27.00 0 26.0	22 25 20	[]	0.685973	6 45	3 47
2.1	18 36 5	(2.05	1 22 25 Ib.	0 13.7	0.688656	6 38	3 47
23		- 0 29.2	23 24 59.	0 16.9	0.691340	6 31	3 47
25	18 37 5	(4.58	-23 24 30.3	2	0.694021	6 23	3 47
27	18 38 3	O.OI 0 35.4	3 22 24 15 5	7 0 23.0	0.696697	6 16	3 47
20		8.50	23 23 48.0	0 27.1	0.699366	6 9	3 48
Okt.	_	0.01	_ 23 23 17.0	0 30.7	0.702023	6 2	3 48
3	18 40 3	34.49	23 22 43.0	5 34.3	0.704667	5 54	3 48
5	18 41 2	+0 47.3	$\begin{bmatrix} 9 \\ -23 & 22 \\ \end{bmatrix}$	1-0 38.1	0.707293	5 47	3 48
ź			5 23 21 23.	0 42.0	0.709901	5 40	3 48
g		5.17 0 53.0	23 20 37.	0 40.0	0.712487	_	3 48
11	1 , 13	0.94	7 23 19 47.	0 50.0	0.715050	5 33 5 2 6	
13	1	7 0 50.4	4 23 18 53.5	0 54.2	0.717587		3 48 3 48
	1	+1 1.0	5	1-0 58.4			
15		0.43 1 3.6	$_{\circ}$ -23 17 54.9	1 2.9	0.720097	5 13	3 48
17		4.03 1 6.1	23 16 52.0	1 7.4	0.722578	5 6	3 48
19		1 0.5	5 23 15 44.6	I 12.1	0.725029	4 59	3 49
21	1 - '-	18.68	1 22 14 22 4	1 16.9	0.727447	4 52	3 49
23	18 50 2	29.62	23 13 15.0	+1 21.7	0.729832	4 45	3 49
25		12.89	-22 TT 52 C		0.732181	4 39	3 49
27	18 52 5	8.45	1 22 10 27		0.734492	4 32	3 49
29	18 54 1	16.24	1 22 X EE 1	1 31.9	0.736765	4 25	3 49
31	18 55 3	26.20	22 7 180	1 3/.2	0.738997	4 19	3 50
Nov. 2	18 56 5	38.26	23 5 35.4	1 42.6	0.741187	4 13	3 50

o ^h Mittl.		AR.	Diff.	Dekl.	Diff.	$\log. \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
CN1.		n m e		0 1 1			h m	h n
Okt.	31	18"55"36.20	+1 22.06	-23 7 18.0	+1 42.6	0.738997	4 19	3 50
Nov.	2	18 56 58.26	1 24.07	23 5 35.4	1 48.1	0.741187	4 13	3 50
	4	18 58 22.33	1 26.04	23 3 47.3	1 53.8	0.743334	4 6	3 50
	6	18 59 48.37	1 27.93	23 1 53.5	1 59.6	0.745436	4 0	3 50
	8	19 1 16.30		22 59 53.9		0.747493	3 53	3 50
	IO	19 2 46.07	1 29.77	-22 57 48.6	1-2 5.3	0.740502	3 47	3 51
	12		1 31.53	-	2 11.2	0.749503		
		19 4 17.60	1 33.23	22 55 37.4	2 17.1	0.751466	3 40	3 51
	14	19 5 50.83	1 34.88	22 53 20.3	2 23.1	0.753381	3 34	3 51
	16	19 7 25.71	1 36.48	22 50 57.2	2 29.2	0.755247	3 28	3 52
	18	19 9 2.19	+1 38.03	22 48 28.0	1-2 35.4	0.757064	3 21	3 52
	20	19 10 40.22		$-22\ 45\ 52.6$		0.758830	3 15	3 52
	22	19 12 19.73	1 39.51	22 43 10.8	2 41.8	0.760545	3 9	3 52
	24	19 14 0.68	1 40.95	22 40 22.6	2 48.2	0.762208	3 3	3 53
	26	19 15 43.01	1 42.33	22 37 27.9	2 54.7	0.763818		
	28		1 43.64		3 1.2		2,	3 53
	40	19 17 26.65	+1 44.90	22 34 2 6.7	+3 7.7	0.765374	2 50	3 53
	30	19 19 11.55	1 46.10	-22 31 19.0	-	0.766875	2 44	3 54
Dez.	2	19 20 57.65		22 28 4.7	3 14.3	0.768321	2 38	3 54
	4	19 22 44.87	1 47.22	22 24 43.9	3 20.8	0.769711	2 32	3 55
	6	19 24 33.15	1 48.28	22 21 16.4	3 27.5	0.771045	2 26	3 55
	8	19 26 22.45	1 49.30	22 17 42.3	3 34.1	0.772323	2 20	3 55
		2.0	+1 50.25		+3 40.7			
	10	19 28 12.70	1 51.14	—22 14 1.6	3 47.3	0.773544	2 14	3 56
	12	19 30 3.84	1 51.99	22 10 14.3	3 53.9	0.774708	2 8	3 56
	14	19 31 55.83	1 52.78	22 6 20.4	4 0.5	0.775814	2 2	3 57
	16	19 33 48.61		22 2 19.9		0.776862	I 56	3 57
	18	19 35 42.14	1 53.53	21 58 12.9		0.777853	I 50	3 58
	20		1 1 54.22	27 52 50 2	14 13.6			
		19 37 36.36	1 54.88	-215359.3	4 20.2	0.778785	I 44	3 58
	22	19 39 31.24	1 55.49	21 49 39.1	4 26.7	0.779660	1 38	3 59
	24	19 41 26.73	1 56.04	21 45 12.4	4 33.1	0.780475	I 32	3 59
4	2 6	19 43 22.77	1 56.53	21 40 39.3	4 39.5	0.781230	I 26	4 0
	28	19 45 19.30		21 35 59.8		0.781925	I 20	4 0
	30	19 47 16.26	+1 56.96	-21 31 14.0	+4 45.8	0.782560	1 14	4 I
	-	19 49 13.60	I 57-34	21 26 22.1	4 51.9	0.783134		
	32	7 .7 .	1 57.66		4 58.0	0.703134		4 I
	34	19 51 11.26		21 21 24.1		0.783648	I 2	4 2

o ^h							
Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
т.	h in s					h m	h ni
Jan. o	3 44 30.99	- 24.28	+17 38 40.3	- 0 49.6	0.919872	9 6	7 42
2	3 44 6.71	22.73	17 37 50.7	0 44.1	0.921046	8 58	7 42
4	3 43 43.98	21.14	17 37 6.6	0 38.4	0.922264	8 50	7 42
6	3 43 22.84	19.51	17 36 28.2	0 32.7	0.923523	8 42	7 42
8	3 43 3.33	-17.83	17 35 55.5	- 0 26.8	0.924821	8 33	7 42
10	3 42 45.50	16.12	+17 35 28.7	0 20.7	0.926156	8 25	7 42
12	3 42 29.38	14.37	17 35 8.0	0 14.6	0.927526	8 17	7 42
14	3 42 15.01	12.60	17 34 53.4	0 8.4	0.928927	8 9	7 42
16	3 42 2.41	10.81	17 34 45.0		0.930358	8 I	7 42
18	3 41 51.60		17 34 42.8		0.931816	7 53	7 42
20		- 9.01		+0 4.1			7 42
	3 41 42.59	7.19	+17 34 46.9	0 10.3	0.933298	7 45	7 42
2.2	3 41 35.40	5.36	17 34 57.2	0 16.6	0.934803	7 37	7 42
24	3 41 30.04	3.52	17 35 13.8	0 22.8	0.936328	7 29	7 42
26	3 41 26.52	- 1.68	17 35 36.6	0 29.1	0.937871	7 21	7 42
28	3 41 24.84	4- 0.17	17 36 5.7	+0 35.3	0.939430	7 13	7 42
30	3 41 25.01	·	+17 36 41.0		0.941004	7 5	7 42
Febr. 1	3 41 27.04	2.03	17 37 22.6	0.41.6	0.942589	6 57	7 42
3	3 41 30.93	3.89	17 38 10.4	0 47.8	0.944184	6 49	7 42
5	3 41 36.68	5.75	17 39 4.4	0 54.0	0.945786	6 42	7 42
7	3 41 44.29	7.61	17 40 4.4	I 0.0	0.947393	6 34	7 42
		+ 9.46	, , , , , ,	+1 6.0	1		
9	3 4 ¹ 53.75	11.29	+17 41 10.4	1 12.0	0.949003	6 26	7 43
11	3 42 5.04	13.11	17 42 22.4	1 17.7	0.950614	6 18	7 43
13	3 42 18.15	14.92	17 43 40.1	1 23.4	0.952224	6 11	7 43
15	3 42 33.07	16.69	17 45 3.5	1 28.0	0.953831	6 3	7 43
17	3 42 49.76	- 18.44	17 46 32.4	-1·I 34.2	0.955433	5 56	7 43
19	3 43 8.20		+17 48 6.6		0.957028	5 48	7 43
21	3 43 28.38	20.18	17 49 46.1	1 39.5	0.958614	5 40	7 43
23	3 43 50.27	21.89	17 51 30.7	1 44.6	0.960191	5 33	7 44
25	3 44 13.84	23.57	17 53 20.3	1 49.6	0.961756	5 25	7 44
27	3 44 39.08	25.24	17 55 14.8	1 54.5	0.963308	5 18	7 44
	3 44 39.00	-1-26.89	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	+1 59.2			/ 44
März 1	3 45 5.97	28.51	+17 57 14.0	2 3.8	0.964846	5 10	7 44
3	3 45 34.48	30.09	17 59 17.8	2 8.1	0.966368	5 3	7 44
5	3 46 4.57	31.67	18 1 25.9	2 12.3	0.967872	4 56	7 45
7	3 46 36.24	33.21	18 3 38.2	2 16.5	0.969357	4 48	7 45
9	3 47 9.45	+34.71	18 5 54.7	-I-2 20.3	0.970821	4 41	7 45
11	3 47 44.16		+18 8 15.0		0.972263	4 34	7 45
13	3 48 20.33	36.17	18 10 39.0	2 24.0	0.973683	4 26	7 46
15	3 48 57.93	37.60	18 13 6.5	2 27.5	0.975078	4 19	7 46
17	3 49 36.92	38.99	18 15 37.2	2 30.7	0.976448	4 12	7 46
19	3 50 17.27	40.35	18 18 11.0	2 33.8	0.977791	4 5	7 46

			11 ani 61	geozentiis	701101 0			
oh Mittl.		AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
3.5		h w a		_ 0 1 "			lı nı	h "m
März	77	3 49 36.92	1 -4∘.35	+18°15 37.2	1-2 33.8	0.976448	4 12	7 46 m
	19	3 50 17.27	41.67	18 18 11.0	2 36.8	0.977791	4 5	7 46
	21	3 50 58.94	42.95	18 20 47.8	2 39.5	0.979107	3 58	7 47
	23	3 51 41.89	44.21	18 23 27.3	2 42.I	0.980394	3 50	7 47
	25	3 52 26.10		18 26 9.4		0.981653	3 43	7 47
	27	3 53 11.53	1-45.43	+18 28 54.0	+2 44.6	0.982882	3 36	7 48
	29	3 53 58.15	46.62	18 31 40.8	2 46.8	0.984080	3 29	7 48
	3Í	3 54 45.93	47.78	18 34 29.7	2 48.9	0.985246	3 22	7 48
Apri		3 55 34.83	48.90	18 37 20.5	2 50.8	0.986380	3 15	7 49
1	4	3 56 24.82	49.99	18 40 13.0	2 52.5	0.987481	3 8	7 49
			4-51.04		+2 54.0			
	6	3 57 15.86	52.06	+18 43 7.0	2 55.4	0.988547	3 1	7 49
	8	3 58 7.92	53.02	18 46 2.4	2 56.7	0.989579	2 54	7 49
	10	3 59 0.94	53.96	18 48 59.1	2 57.6	0.990575	2 47	7 50
	12	3 59 54.90	54.84	18 51 56.7	2 58.5	0.991536	2 40	7 50
	14	4 0 49.74	+55.69	18 54 55.2	+2 59.0	0.992460	2 33	7 50
	16	4 I 45.43	, ,	+18 57 54.2	-	0.993347	2 26	7 51
	18	4 2 41.94	56.51	19 0 53.7	2 59.5	0.994197	2 19	7 51
	20	4 3 39.23	57.29	19 3 53.6	2 59.9	0.995009	2 12	7 51
	22	4 4 37.27	58.04	19 6 53.7	3 0.1	0.995783	2 5	7 52
	24	4 5 36.02	58.75	19 9 53.8	3 0.1	0.996519	1 58	7 52
			1-59-43		+3 0.1			_
	2 6	4 6 35.45	60.08	+19 12 53.9	2 59.8	0.997216	1 51	7 52
	28	4 7 35.53	60.68	19 15 53.7	2 59.5	0.997874	I 44	7 53
Mai	30	4 8 36.21	61,26	19 18 53.2	2 59.0	0.998492	I 37	7 53
Mai	2	4 9 37.47	61.79	19 21 52.2	2 58.3	0.999071	1 31	7 53
	4	4 10 39.26	+62.29	19 24 50.5	+2 57.5	0.999610	I 24	7 54
	6	4 11 41.55	62.76	+19 27 48.0		1.000108	1 17	7 54
	8	4 12 44.31	63.17	19 30 44.6	2 56.6	1.000566	1 10	7 54
	10	4 13 47.48		19 33 40.1	2 55.5	1.000983	1 3	7 55
	12	4 14 51.04	63.56	19 36 34.4	2 54.3	1.001359	0 56	7 55
	14	4 15 54.94	63.90	19 39 27.4	2 53.0	1.001694	0 50	7 55
	16		+64.20		+2 51.5	1.001987		
	18		64.48	+19 42 18.9	2 50.1		0 43	
		1 '	64.72	19 45 9.0	2 48.4	1.002239	0 36	7 56
	20	4 19 8.34	64.92	19 47 57.4	2 46.7	1.002450	0 29	7 56
	22	4 20 13.26	65.09	19 50 44.1	2 44.9	1.002620	0 22	7 57
	24	4 21 18.35	+65.23	19 53 29.0	+2 42.9	1.002749	0 16	7 57
	26	4 22 23.58	65.33	+19 56 11.9	2 41.0	1.002838	0 9	7 57
	28	4 23 28.91	65.40	19 58 52.9	2 38.9	1.002885	0 2	7 58
	30	4 24 34.31	65.44	20 1 31.8	2 36.8	1.002891	23 55	7 58
Juni	I	4 25 39.75	65.44	20 4 8.6	2 34.5	1.002855	23 48	7 58
	3	4 20 45.19	25.44	20 6 43.1	~ 34.3	1.002777	23 42	7 59

		Wahre	r geozentri	scher (rt.		
o ^h Mittl. Zeit	AR.	Diff,	Dekl.	Diff.	\log . Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Juni 1	4 25 39.75		+20 4 8.6		1.002855	23 48 m	7 ^h 58 ^m
3	4 26 45.19	-1-65.44	20 6 43.1	1-2 34.5	1.002777	23 42	7 59
5	4 27 50.59	65.40	20 9 15.2	2 32.1	1.002658	23 35	7 59
7	4 28 55.91	65.32	20 11 44.9	2 29.7	1.002498	23 28	7 59
9	4 30 1.10	65.19	20 14 12.0	2 27.1	1.002296	23 21	7 59
9	4 30 1.10	1-65.03	20 14 12.0	1-2 24.6	1.002290	23 21	
11	4 31 6.13	64.83	+20 16 36.6	2 21.9	1.002053	23 14	8 0
13	4 32 10.96	64.60	20 18 58.5	2 19.3	1.001770	23 8	8 0
15	4 33 15.56	64.34	20 21 17.8	2 16.6	1.001446	23 I	8 0
17	4 34 19.90		20 23 34.4	2 13.8	1.001081	22 54	8 0
19	4 35 23.95	64.05	20 25 48.2		1.000677	22 47	8 1
21	4 36 27.66	+63.71	1 20 25 50 2	-j-2 11.0	1.000233	22 40	8 I
		63.35	+20 27 59.2	2 8.2		' '	_
23	4 37 31.01	62.95	20 30 7.4	2 5.3	0.999750	22 33	
25	4 38 33.96	62.52	20 32 12.7	2 2.4	0.999227	22 27	8 1
27	4 39 36.48	62.05	20 34 15.1	1 59.4	0.998665	22 20	8 2
29	4 40 38.53	1-61.55	20 36 14.5	I-I 56.4	0.998063	22 13	8 2
Juli 1	4 41 40.08		+20 38 10.9		0.997422	22 6	8 2
3	4 42 41.07	60.99	20 40 4.3	I 53.4	0.996743	21 59	8 2
5	4 43 41.47	60.40	20 41 54.6	1 50.3	0.996025	21 52	8 3
7	4 44 41.24	59-77	20 43 41.9	1 47.3	0.995270	21 45	8 3
9	4 45 40.34	59.10	20 45 26.0	1 44.1	0.994477	21 39	8 3
		-1-58.40	20 45 20.0	11 40.9		41 39	,
11	4 46 38.74	57.66	-1-20 47 6.9	r 37-9	0.993647	21 32	8 3
13	4 47 36.40	56.88	20 48 44.8	1 34.8	0.992781	21 25	8 3
15	4 48 33.28	56.08	20 50 19.6	I 31.7	0.991879	21 18	8 4
17	4 49 29.36		20 51 51.3	1 28.6	0.990942	21 11	8 4
19	4 50 24.59	55.23	20 53 19.9		0.989971	21 4	8 4
2.7	4 51 18.95	1-54.36		1 25.4	0.988965	00 FF	8 4
21		53-44	+20 54 45.3	1 22.3		20 57	
23	4 52 12.39	52.49	20 56 7.6	1 19.2	0.987926	20 50	
25	4 53 4.88	51.51	20 57 26.8	1 16.2	0.986853	20 43	8 4
27	4 53 56.39	50.48	20 58 43.0	1 13.0	0.985747	20 36	8 5
29	4 54 46.87	-1-49.41	20 59 56.0	+r 9.9	0.984609	20 29	8 5
31	4 55 36.28		+21 I 5.9		0.983440	20 22	8 5
Aug. 2	4 56 24.58	48.30	21 2 12.7	1 6.8	0.982240	20 15	8 5
4	4 57 11.74	47.16	21 3 16.5	1 3.8	0.981010	20 8	8 5
6	4 57 57.70	45.96	21 4 17.3	I 0.8	0.979751	20 0	8 5
8	4 58 42.44	44.74	21 5 15.0	○ 57.7	0.978464	19 53	8 5
		-1-43.48	5 5	±0 54∙7		, , ,)
IO	4 59 25.92	42.19	+21 6 9.7	0 51.8	0.977150	19 46	8 5
12	5 0 8.11	40.87	21 7 1.5	0 48.8	0.975809	19 39	8 5
14	5 0 48.98	39.52	21 7 50.3	0 46.0	0.974444	19 32	8 6
16	5 I 2 8.50	38.14	21 8 36.3	0 43.1	0.973055	19 25	8 6
18	5 2 6.64	50.14	21 9 19.4	45.4	0.971643	19 17	8 6

Wahrer geozentrischer Ort.

o ^h Mittl.		AR.	Dia.	Dekl.	Diff.	${\rm Log.} \; \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Aug.	т6	5 1 28.50		+21° 8 36.3		0.054075	h m	8 ^h 6 ^m
Aug.	18		+38.14		+0 43.1	0.973055	19 25	8 6
		,	36.72	21 9 19.4	0 40.3	0.971643	19 17	8 6
	20	5 2 43.36	35.26	21 9 59.7	0 37.4	0.970208	19 10	8 6
	22	5 3 18.62	33.78	21 10 37.1	0 34-5	0.968752	19 3	8 6
	24	5 3 52.40	+32.25	21 11 11.6	+0 31.8	0.967275	18 55	
	2 6	5 4 24.65	30.70	+21 11 43.4	0 29.1	0.965780	18 48	8 6
	28	5 4 55.35	29.10	21 12 12.5	0 26.4	0.964267	18 41	8 6
	30	5 5 24.45	27.47	21 12 38.9	0 23.7	0.962738	18 33	8 6
Sept.	I	5 5 51.92	25.81	21 13 2.6	0 21.0	0.961193	18 26	8 6
	3	5 6 17.73		21 13 23.6		0.959635	18 18	8 6
	5	5 6 41.85	+24.12	+21 13 42.0	-+0 18.4	0.958065	18 11	8 6
	7	5 7 4.26	22.41	21 13 57.9	0 15.9	0.956485	18 3	8 6
	9	5 7 24.94	20.68	21 14 11.2	0 13.3	0.954896	17 56	8 6
	II	5 7 43.87	18.93	21 14 22.1	0 10.9	0.953300	17 48	8 6
	13	5 8 1.04	17.17	21 14 30.5	0 8.4	0.951698	17 41	8 6
		,	+15.38		+0 6.0		1 -/	
	15	5 8 16.42	13.57	+21 14 36.5	0 3.7	0.950092	17 33	8 6
	17	5 8 29.99	11.74	21 14 40.2	+0 1.3	0.948485	17 25	8 6
	19	5 8 41.73	9.90	21 14 41.5	-o 1.0	0.946878	17 18	8 6
	21	5 8 51.63	8.04	21 14 40.5	0 3.4	0.945272	17 10	8 6
	23	5 8 59.67	+ 6.16	21 14 37.1	-0 5.6	0.943669	17 2	8 6
	25	5 9 5.83	4.27	+21 14 31.5		0.942071	16 54	8 6
	27	5 9 10.10	2.38	21 14 23.6	0 7.9 0 10.1	0.940479	16 47	8 6
	29	5 9 12.48	-	21 14 13.5		0.938897	16 39	8 6
Okt.	1	5 9 12.95	+ 0.47	21 14 1.2	0 12.3	0.937326	16 31	8 6
	3	5 9 11.52	- 1.43	21 13 46.7	0 14.5	0.935769	16 23	8 6
	-	5 9 8.20	- 3.32	+21 13 30.2	-0 16.5	0.934227	16 15	8 6
	5 7	5 9 8.20	5.21	+21 13 30.2 21 13 11.6	0 18.6	, , ,	1 -	8 6
		0	7.08		0 20,6	0.932704	1 '	8 6
	9	0 000	8.95	21 12 51.0 21 12 28.3	0 22.7	0.931201	15 59	8 6
		1 2 2 1.7.	10.80		0 24.6	0.929720	15 51	
	13	, ,	-12.62	21 12 3.7	-0 26.5	0.928263	15 43	8 6
	15	5 8 23.54	14.43	+21 11 37.2	0 28.5	0.926833	15 35	8 6
	17	5 8 9.11	16.20	21 11 8.7	0 30.3	0.925431	15 27	8 6
	19	5 7 52.91	17.96	21 10 38.4	0 32.2	0.924060	15 19	8 6
	21	5 7 34.95	19.69	21 10 6.2		0.922722	15 10	8 6
	23	5 7 15.26	, ,	21 9 32.1	0 34.1	0.921419	15 2	8 6
	25	5 6 53.87	-21.39	+2x 8 56.3	-0 35.8	0.920154	14 54	8 6
	27	5 6 30.81	23.06	21 8 18.7	0 37.6	0.918930	14 46	8 6
	29	5 6 6.13	24.68	21 7 39.4	0 39.3	0.917747	14 37	8 6
	31	5 5 39.88	26.25	21 6 58.4	0 41.0	0.916609	14 29	8 5
Nov.	2	5 5 12.12	27.76	21 6 15.8	0 42.6	0.915517	14 21	-
* 10774	24	1)) 12.12		1 21 0 15.0		1 ~.2221/	1 4 41	8 5

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Okt. 31	h m 000				2016600	h m	8 5 m
37	5 5 39.88	-27.76	+21 6 58.4	-0 42.6	0.916609	14 29	-
	5 5 12.12	29.20	21 6 15.8	0 44.0	0.915517	14 21	
4	5 4 42.92	30.60	21 5 31.8	0 45.4	0.914474	14 12	8 5
6	5 4 12.32	31.91	21 4 46.4	0 46.8	0.913482	14 4	8 5
8	5 3 40.41	-33.16	21 3 59.6	-0 48.1	0.912542	13 56	8 5
10	5 3 7.25		+21 3 11.5		0.911656	13 47	8 5
12	5 2 32.90	34.35	21 2 22.1	0 49.4	0.910826	13 39	8 5
14	5 1 57.44	35.46	21 1 31.5	0 50.6	0.910053	13 30	8 5
16	5 I 20.95	36.49	21 0 39.8	0 51.7	0.909339	13 22	8 5
18		37.46		0 52.8	0.908686		8 5
10	5 0 43.49	-38.34	20 59 47.0	-0 53.6	0.900000	13 13	
20	5 0 5.15	39.15	+20 58 53.4	0 54.5	0.908094	13 5	8 5
22	4 59 26.00	39.87	20 57 58.9	0 55.1	0.907565	12 56	8 4
24	4 58 46.13		20 57 3.8		0.907100	12 48	8 4
26	4 58 5.63	40.50	20 56 8.0	0 55.8	0.906701	12 39	8 4
28	4 57 24.61	41.02	20 55 11.8	0 56.2	0.906369	12 30	8 4
20		-41.45		-0 56.6		10.00	_
D 30	4 56 43.16	41.78	+20 54 15.2	0 56.8	0.906105	12 22	
Dez. 2	4 56 1.38	42.01	20 53 18.4	0 56.8	0.905908	12 13	
4	4 55 19.37	42.15	20 52 21.6	0 56.7	0.905779	12 5	8 4
6	4 54 37.22	42.17	20 51 24.9	0 56.4	0.905719	11 56	8 4
8	4 53 55.05	-42.11	20 50 28.5	-0 56.0	0.905727	11 48	8 4
10	4 53 12.94		+20 49 32.5		0.905804	11 39	8 3
12	4 52 30.99	41.95	20 48 37.0	0 55.5	0.905949	11 30	8 3
14	4 51 49.30	41.69	20 47 42.2	0 54.8	0.906162	II 22	8 3
16	4 51 7.95	41.35	20 46 48.3	0 53.9	0.906443	11 13	8 3
18	4 50 27.04	40.9t	20 45 55.3	0 53.0	0.906790	11 5	8 3
		-40.38		-0 5 1.9			
20	4 49 46.66	39•77	+20 45 3.4	0 50.5	0.907203	10 56	8 3
22	4 49 6.89	39.06	20 44 12.9	0 49.0	0.907683	10 48	8 3
24	4 48 27.83	38.25	20 43 23.9	0 47-3	0.908228	10 39	8 3
2 6	4 47 49.58	37.36	20 42 36.6	0 45.5	0.908836	10 30	8 3
28	4 47 12.22		20 41 51.1		0.909507	10 22	8 3
30	4 46 35.85	-36.37	+20 41 7.7	-0 43.4	0.910240	10 13	8 2
32	4 46 0.55	35.30	20 40 26.4	0 41.3	0.911032	10 5	8 2
34	4 45 26.41	34.14	20 39 47.6	0 38.8	0.911882	9 57	8 2
3+	1 7 4) 40.41	1	7 39 47.0		1 921002	9 37	

o ^h Mittl.		AR.	Diff.	Dekl.	Diff.	$\text{Log.}\ \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Jan.	0	20"18""11.67		-20° 14° 27″9		1.316015	1 40	h m 4 9
oan.	2	20 18 39.35	+27.68	20 12 56.9	+91.0	1.316289	1 33	4 9
	4	20 10 39.33	27.94	20 11 24.8	92.1	1.316542	I 25	4 10
	6	20 19 7.29	28.17	20 9 51.8	93.0	1.316772	1 18	4 10
	8	20 20 3.83	28.37	20 8 18.0	93.8	1.316978	1 10	4 10
		9 9	+28.56		-1-94-7			· ·
	10	20 20 32.39	28.72	-20 6 43.3	95.4	1.317160	I 3	4 10
	12	20 21 1.11	28.86	20 5 7.9	96.0	1.317319	0 56	4 11
	14	20 21 29.97	28.97	20 3 31.9	96.6	1.317455	0 48	4 11
	16	20 21 58.94	29.05	20 1 55.3	97.1	1.317567	0 41	4 11
	18	20 22 27.99	- - 29.12	20 0 18.2	-F97-4	1.317655	0 33	4 11
	20	20 22 57.11		-19 58 40.8		1.317720	0 26	4 11
	22	20 23 26.26	29.15	19 57 3.0	97.8	1.317761	0 19	4 11
	24	20 23 55.43	29.17	19 55 24.9	98.1	1.317779	0 11	4 12
	26	20 24 24.58	29.15	19 53 46.6	98.3	1.317773	0 4	4 12
	28	20 24 53.69	29.11	19 52 8.3	98.3	1.317743	23 56	4 12
			- -29.04		-1-98.3			
Febr	30	20 25 22.73	28.96	-19 50 30.0	98.2	1.317690	23 49	4 12
reor.		20 25 51.69	28.84	19 48 51.8	98.1	1.317613	23 42	4 12
	3	20 26 20.53	28.70	19 47 13.7	97.7	1.317512	23 34	4 12
	5	20 26 49.23	28.54	19 45 36.0	97-3	1.317388	23 27	4 13
	7	20 27 17.77	- J-2 8.36	19 43 58.7	+97.0	1.317241	23 19	4 13
	9	20 27 46.13	28.15	-194221.7	96.5	1.317071	23 12	4 13
	11	20 28 14.28	27.91	19 40 45.2	95.8	1.316877	23 5	4 13
	13	20 28 42.19	27.65	19 39 9.4	95.0	1.316661	22 57	4 13
	15	20 29 9.84	27.38	19 37 34.4	94.3	1.316422	22 50	4 13
	17	20 29 37.22		19 36 0.1		1.316161	22 42	4 14
	19	20 30 4.29	1-27.07	19 34 26.7	+93.4	1.315878	22 35	4 14
	21	20 30 31.04	26.75	19 32 54.3	92.4	1.315574	22 27	4 14
	23	20 30 57.45	26.41	19 31 23.0	91.3	1.315249	22 20	4 14
	25	20 31 23.49	26.04	19 29 52.7	90.3	1.314902	22 13	4 14
	27	20 31 49.14	25.65	19 28 23.7	89.0	1.314534	22 5	4 15
3.6	_ ′ I		+25.25	, ,,	+87.6		_	
März		20 32 14.39	24.82	—19 2 6 56.1	86.2	1.314146	21 58	4 15
	3	20 32 39.21	24.37	19 25 29.9	84.8	1.313739	21 50	4 15
	5	20 33 3.58	23.90	19 24 5.1	83.2	1.313312	21 43	4 15
	7	20 33 27.48	23.40	19 22 41.9	81.5	1.312865	21 35	4 15
	9	20 33 50.88	+22.89	19 21 20.4	+79.8	1.312400	21 29	4 15
	11	20 34 13.77	22.36	—19 2 0 0.6		1.311917	21 21	4 15
	13	20 34 36.13	21.81	19 18 42.7	77.9 76.0	1.311415	21 13	4 16
	15	20 34 57.94	21.24	19 17 26.7	,	1.310897	21 5	4 16
	17	20 35 19.18	20.65	19 16 12.7	74.0 72.0	1.310363	20 58	4 16
	19	20 35 39.83	20.05	19 15 0.7	12.00	1.309812	20 50	4 16

o ^h Mittl. Zeit	AR.	Die.	Dekl.	Diff.	$\operatorname{Log.}\Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
März 17	20 35 19.18		—19° 16′ 12.7		1.310363	20 58 m	4 16 m
		+20.65		+72.0	1.309812	1	4 16
19 21	20 35 39.83	20.05	19 15 0.7	69.9	-	20 50	
	20 35 59.88	19.44	19 13 50.8	67.7	1.309245	20 43	'
23	20 36 19.32	18.81	19 12 43.1	65.4	1.308664	20 35	4 16
25	20 36 38.13	+18.17	19 11 37.7	4-63.2	1.308069	20 27	4 16
27	20 36 56.30	17.51	-19 10 34.5	60.8	1.307460	20 20	4 16
29	20 37 13.81	16.83	19 9 33.7	58.3	1.306837	20 12	4 17
31	20 37 30.64	16.15	19 8 35.4	55.8	1.306201	20 5	4 17
April 2	20 37 46.79	15.44	19 7 39.6	53.2	1.305554	19 57	4 17
4	20 38 2.23		19 6 46.4		1.304896	19 49	4 17
6	20 38 16.96	+14.73	—19 5 55.7	-F-50.7	1.304227	19 42	4 17
8	20 38 30.96	14.00	19 5 7.7	48.0	1.303548	19 34	4 17
10	20 38 44.22	13.26	19 4 22.5	45.2	1.302861	19 26	4 17
12	20 38 56.72	12.50	19 3 40.2	42.3	1.302165	19 19	4 17
14	20 39 8.46	11.74	19 3 0.7	39.5	1.301461	19 11	4 17
16	20 39 19.43	+10.97	—19 2 24.0	+36.7	1.300751	19 3	4 17
18	37 7 13	10.20		33.8		18 56	
20	3, , 3	9.42	19 1 50.2	30.8	1.300035	18 48	4 17
	20 39 39.05	8.63	19 1 19.4	27.9	1.299314		4 17
22	20 39 47.68	7.83	19 0 51.5	25.0	1.298588	18 40	4 17
24	20 39 55.51	+ 7.03	19 0 26.5	+22.0	1.297858	18 32	4 18
26	20 40 2.54	6.23	$-19 \circ 4.5$	18.9	1.297126	18 25	4 18
28	20 40 8.77	5.42	18 59 45.6	15.9	1.296392	18 17	4 18
30	20 40 14.19	4.61	18 59 29.7	12.8	1.295656	18 9	4 18
Mai 2	20 40 18.80	3.79	18 59 16.9	9.8	1.294919	18 I	4 18
4	20 40 22.59	+ 2.98	18 59 7.1	+ 6.7	1.294184	17 53	4 18
6	20 40 25.57	2.16	—18 59 O.4	3.6	1.293450	17 46	4 18
8	20 40 27.73		18 58 56.8		1.292717	17 38	4 18
IO	20 40 29.07	1.34	18 58 56.3	+ 0.5	1.291987	17 30	4 18
12	20 40 29.60	+ 0.53	18 58 58.8	- 2.5	1.291262	17 22	4 18
14	20 40 29.32	- 1.08	18 59 4.3	5.5 - 8.5	1.290542	17 14	4 18
16	20 40 28.24	1.88	—18 59 12.8	11.6	1.289828	17 6	4 18
18	20 40 26.36	2.68	18 59 24.4		1.289120	16 58	4 18
20	20 40 23.68		18 59 38.9	14.5	1.288419	16 50	4 18
22	20 40 20.22	3,46	18 59 56.3	17.4	1.287727	16 42	4 18
24	20 40 15.97	4.25	19 0 16.5	20.2	1.287043	16 35	4 18
2 6	20 40 10.95	- 5.02 5.78	−19 ○ 39 .6	-23.1	1.286369	16 27	4 18
28	20 40 5.17		19 1 5.5	25.9 28.7	1.285706	16 19	4 17
30	20 39 58.64	6.53	19 1 34.2		1.285055	16 11	4 17
Juni 1	20 39 51.36	7.28	19 2 5.6	31.4	1.284416	16 2	4 17
3	20 39 43.35	8.01	19 2 39.7	34.1	1.283790	15 54	4 17
_			, , , , , ,				

		· · · · · · · · · · · · · · · · · · ·	ramiei	geozentiist	71101 0	7 (*		
Mittl.		AR.	Diff.	Dekl.	Di ű.	$\operatorname{Log.} \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Juni	I	20 39 51.36	- 8.or	_19 2 5.6		1.284416	16 2 m	4 17 m
	3	20 39 43.35		19 2 39.7	-34.1	1.283790	15 54	4 17
	5	20 39 34.62	8.73	19 3 16.4	36.7	1.283179	15 46	4 17
	7	20 39 25.18	9-44	19 3 55.6	39-2	1.282582	15 38	4 17
	9	20 39 15.06	10.12	19 4 37.3	41.7	1.282000	15 30	4 17
			-10.80	,	-44.1			-
	11	20 39 4.26	11.44	—19 5 2I.4	46.4	1.281435	15 22	4 17
	13	20 38 52.82	12.07	19 6 7.8	48.6	1.280888	15 14	4 17
	15	20 38 40.75	12.68	19 6 56.4	50.7	1.280359	15 6	4 17
	17	20 38 28.07	13.28	19 7 47.1	52.8	1.279848	14 58	4 17
	19	20 38 14.79	-13.84	19 8 39.9	-54.7	1.279356	14 50	4 17
	21	20 38 0.95		— 1 9 9 34.6		1.278885	14 42	4 17
	23	20 37 46.56	14.39	19 10 31.1	56.5	1.278434	14 34	4 16
	25	20 37 31.64	14.92	19 11 29.3	58.2	1.278004	14 26	4 16
	27	20 37 16.21	15.43	19 12 29.2	59.9	1.277596	14 17	4 16
	29	20 37 0.30	15.91	19 13 30.7	61.5	1.277211	14 9	4 16
Juli			- 16.37	,	-63.0		' '	6
oun	I	20 36 43.93	16.80	—19 14 33.7	64.4	1.276848	14 1	4 16
	3	20 36 27.13	17.20	19 15 38.1	65.7	1.276509	13 53	4 16
	5	20 36 9.93	17.58	19 16 43.8	66.7	1.276194	13 45	4 16
	7	20 35 52.35	17.92	19 17 50.5	67.7	1.275904	13 36	4 16
	9	20 35 34.43	-18.24	19 18 58.2	-68.7	1.275639	13 28	4 16
	11	20 35 16.19	18.53	— 19 2 0 6.9	69.5	1.275399	13 20	4 15
	13	20 34 57.66	18.78	19 21 16.4	70.1	1.275185	13 12	4 15
	15	20 34 38.88	19.01	19 22 26.5	70.6	1.274997	13 4	4 15
	17	20 34 19.87	19.20	19 23 37.1	71.1	1.274835	12 56	4 15
	19	20 34 0.67		19 24 48.2		1.274700	12 47	4 15
	21	20 33 41.31	-19.36	—19 2 5 59.6	-71.4	1.274592	12 39	4 15
	23	20 33 21.81	19.50	19 27 11.1	71.5	1.274511	12 31	4 15
	25	20 33 2.21	19.60	19 28 22.6	71.5	1.274456	12 23	4 15
	27	20 32 42.5.1	19.67	19 29 34.2	71.6	1.274428	12 15	4 14
	29	20 32 22.82	19.72	19 30 45.7	71.5	1.274427	12 6	4 14
		10 32 22102	-19.72		-71.I	1.2/442/		7 14
	31	20 32 3.10	19.69	-19 31 56.8	70.8	1.274454	11 58	4 14
Aug.		20 31 43.41	19.62	19 33 7.6	70.3	1.274508	11 50	4 14
	4	20 31 23.79	19.53	19 34 17.9	69.7	1.274589	11 42	4 14
	6	20 31 4.26	19.40	19 35 27.6	68.9	1.274698	11 34	4 14
	8	20 30 44.86	-19.24	19 36 36.5	68.1	1.274834	11 25	4 14
	10	20 30 25.62	19.05	19 37 44.6	67.1	1.274996	11 17	4 13
	12	20 30 6.57	18.84	19 38 51.7	66.0	1.275185	11 9	4 13
	14	20 29 47.73	18.58	19 39 57.7	64.8	1.275401	II I	4 13
	16	20 29 29.15	18.29	19 41 2.5	63.5	1.275642	10 52	4 13
	18	20 29 10.86	1.7.29	19 42 6.0	93.5	1.275909	10 44	4 13

o ^b Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl, Stunden- Winkel	Halber Tag- bogen
Aug. 16	20 29 29.15		-19°41′ 2.5	"	1.275642	10 52 m	h m
18	20 29 10.86	-18.29		-63.5	1.275909	1	4 13
20	20 28 52.88	17.98	, ,	62.2	1.275202	10 44	4 13
22		17.64	/ 13	60.8	1.276520	10 28	4 13
		17.27	19 44 9.0 19 45 8.1	59. t		10 20 10 20	4 13
24	20 28 17.97	- 16.87	7 13	-57-5	1.276862		4 13
2 6	20 28 1.10	16.43	—19 46 5.6	55-9	1.277228	10 12	4 13
28	20 27 44.67	15.97	19 47 1.5	54.0	1.277618	10 3	4 12
30	20 27 28.70	15.49	19 47 55.5	52.0	1.278032	9 55	4 12
Sept. 1	20 27 13.21	14.97	19 48 47.5	50.1	1.278468	9 47	4 12
3	20 26 58.24	-14.42	19 49 37.6	-48.1	1.278926	9 39	4 12
5	20 26 43.82	13.86	—19 50 25 .7	45.9	1.279406	9 31	4 12
7	20 26 29.96		19 51 11.6	43.6	1.279907	9 23	4 12
9	20 26 16.69	13.27	19 51 55.2		1.280427	9 15	4 12
II	20 26 4.03		19 52 36.6	41.4	1.280966	9 7	4 12
13	20 25 52.00	12.03	19 53 15.6	39.0	1.281524	8 59	4 12
15	20 25 40.62	-11.38	—19 53 52.2		1.282100	8 50	4 [2
17	20 25 29.92	10.70	19 54 26.4	34.2	1.282693	8 42	4 12
19	20 25 19.91	10.01	19 54 58.1	31.7	1.283302	8 34	4 12
2.1	20 25 10.60	9.31	19 55 27.3	20.2	1.283927	8 26	4 12
23	20 25 2.02	8.58 - 7.84	19 55 53.9	26.6	1.284567	8 18	4 12
25	20 24 54.18		19 56 17.9	-24.0	1.285220	8 10	4 11
27	20 24 47.09	7.09	19 56 39.2	18.6	1.285887	8 2	4 11
29	20 24 40.78	6.31	19 56 57.8		1.286567	7 54	4 11
Okt. I	20 24 35.25	5.53	19 57 13.6	15.8	1.287258	7 46	4 11
3	20 24 30.52	4.73	19 57 2 6.6	13.0	1.287959	7 38	4 11
5	20 24 26.59	- 3.93	—19 57 36.9	_	1.288670	7 30	4 11
7	20 24 23.48	3.11	19 57 44.4	7.5	1.289390	7 22	4 11
9	20 24 21.20	2.28	19 57 49.0	4.6	1.290118	7 15	4 11
11	20 24 19.74	1.46 — 0.62	19 57 50.7	1.7	1.290852	7 7	4 11
13	20 24 19.12	+ 0.21	19 57 49.5	+ 1.2	1.291592	6 59	4 11
15	20 24 19.33		—I9 57 45.5	+ 4.0	1.292336	6 51	4 11
17	20 24 20.38	1.05	19 57 38.6	6.9	1.293085	6 43	4 11
19	20 24 22.28	1.90	19 57 28.8	9.8	1.293837	6 35	4 11
21	20 24 25.02	2.74	19 57 16.2	12.6	1.294591	6 27	4 11
23	20 24 28.61	3.59	19 57 0.7	15.5	1.295348	6 19	4 11
25	20 24 33.04	+ 4.43	—19 56 42·3		1.296106	6 12	4 11
27	20 24 38.32	5.28	19 56 21.0	21.3	1.296863	6 4	4 11
29	20 24 44.44	6.12	19 55 56.8	24.2	1.297618	5 56	4 12
31	20 24 51.39	6.95	19 55 29.8	27.0	1.298372	5 48	4 12
Nov. 2	20 24 59.18	7.79	19 54 59.9	29.9	1.299123	5 41	4 12

o" Mittl.	Zeit	AR.	Diff.	Dekl.	Diff.	$Log. \Delta$	Östl. Stunden- Winkel	Halber Tag bogen
Okt.	31	20 24 51.39		—19 55 29.8		1.298372	5 48 m	4 12
Nov.	2	20 24 59.18	+ 7.79	19 54 59.9	+29.9	1.2903/2	5 41	4 12
1101.	4		8.61	2 2 . 32 /	32.7	1.299123		4 12
	6	20 25 7.79 20 25 17.23	9.44		35.5	1.300612	5 33	
	8	3 , 3	10.25	19 53 51.7	38.4		5 25	
	0	20 25 27.48	+11.05	19 53 13.3	+41.1	1.301349	5 17	4 12
	10	20 25 38.53	11.85	-19 52 32.2	43.8	1.302079	5 10	4 12
	12	20 25 50.38	12.63	19 51 48.4	46.4	1.302802	5 2	4 12
	14	20 26 3.01	_	19 51 2.0		1.303517	4 54	4 12
	16	20 26 16.40	13.39	19 50 12.9	49.1	1.304223	4 47	4 12
	18	20 26 30.55	14.15	19 49 21.1	51.8	1.304920	4 39	4 12
			+14.90		+54.3			
	20	20 26 45.45	15.63	-19 48 26.8	56.9	1.305606	4 31	4 12
	22	20 27 1.08	16.36	19 47 29.9	59.4	1.306282	4 24	4 12
	24	20 27 17.44	17.06	19 46 30.5	61.9	1.306947	4 16	4 13
	2 6	20 27 34.50	17.75	19 45 28.6	64.3	1.307600	4 8	4 13
	2 8	20 27 52.25	+18.42	19 44 24.3	+66.8	1.308239	4 I	4 13
	30	20 28 10.67		—19 43 17.5		1.308864	3 53	4 13
Dez.	2	20 28 29.74	19.07	19 42 8.4	69.1	1.309475	3 46	4 13
	4	20 28 49.45	19.71	19 40 57.0	71.4	1.310071	3 38	4 13
	6	20 29 9.78	20.33	19 39 43.4	73.6	1.310651	3 31	4 13
	8	20 29 30.70	20.92	19 38 27.6	75.8	1.311214	3 23	4 13
		, , ,	+21.50	, , ,	+77.9			
	10	20 29 52.20	22.06	19 37 9.7	79.9	1.311761	3 16	4 14
	12	20 30 14.26	22.59	19 35 49.8	81.9	1.312291	3 8	4 14
	14	20 30 36.85	23.11	19 34 27.9	83.8	1.312803	3 I	4 14
	16	20 30 59.96	23.61	19 33 4.1	85.8	1.313296	2 53	4 14
	18	20 31 23.57		19 31 38.3		1.313771	2 46	4 14
	20	20 31 47.66	-F24.09	-19 30 10.7	+87.6	1.314227	2 38	4 14
	22	20 32 12.21	24.55	19 38 41.4	89.3	1.314227	2 31	
	2.1	20 32 37.19	24.98		90.9		-	
	26		25.39	19 27 10.5	92.6	1.315080	3	4 15
	28	33 3	25.78	19 25 37.9	94.2	1.315476		4 15
	20	20 33 28.36	+26.16	19 24 3.7	+95.6	1.315851	2 8	4 15
	30	20 33 54.52	26.49	-19 22 28.1	97.0	1.316204	2 1	4 15
	32	20 34 21.01	26.82	19 20 51.1	98.4	1.316535	1 53	4 15
	34	20 34 47.83	20.02	19 19 12.7	90.4	1.316845	1 46	4 16

		wanrer	geozentrisc	mer O	rt.		
o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
т	h m s		0 / 0"		C 0.	h m	8 2 m
Jan. o	7 47 31.86	-13.70	-F2° 37 48.4	+35.9	1.462872	13 10	
2	7 47 18.16	13.83	20 38 24.3	36.4	1.462742	13 1	8 2
4	7 47 4.33	13.97	20 39 0.7	36.8	1.462630	12 53	8 2
6	7 46 50.36	14.09	20 39 37.5	37.0	1.462537	12 45	8 2
8	7 46 36.27	-14.17	20 40 14.5	+37.2	1.462462	12 37	8 2
10	7 46 22.10		+20 40 51.7		1.462406	12 29	8 2
12	7 46 7.88	14.22	20 41 29.0	37-3	1.462368	12 21	8 3
14	7 45 53.62	14.26	20 42 6.4	37-4	1.462349	12 13	8 3
16	7 45 39.35	14.27	20 42 43.9	37-5	1.462349	12 5	8 3
18	7 45 25.09	14.26	20 43 21.3	37-4	1.462368	11 56	8 3
•		- 14.22		+37.3			
20	7 45 10.87	14.16	+20 43 58.6	37.2	1.462405	11 48	8 3
22	7 44 56.71	14.08	20 44 35.8	37.0	1.462461	11 40	8 3
24	7 44 42.63	13.98	20 45 12.8	36.7	1.462535	11 32	8 3
26	7 44 28.65	13.85	2 0 45 49.5	36.4	1.462628	11 24	8 3
28	7 44 14.80	-13.70	2 0 46 2 5.9	+36.0	1.462739	11 16	8 3
30	7 44 1.10		+20 17 1.9		1.462868	11 8	8 3
Febr. 1	7 43 47.57	13.53	20 47 37.5	35.6	1.463014	II O	8 3
3	7 43 34.23	13.34	20 48 12.6	35.1	1.463179	10 51	8 3
5	7 43 21.11	13.12	20 48 47.2	34.6	1.463361	10 43	8 3
7	7 43 8.23	12.88	20 49 21.2	34.0	1.463560	10 35	8 3
•		-12.63	.,	+33.4		0.0	,
9	7 42 55.60	12.35	+20 49 54.6	32.8	1.463776	10 27	8 3
11	7 42 43.25	12.04	20 50 27.4	32.0	1.464009	10 19	8 4
13	7 42 31.21	11.72	20 50 59.4	31.2	1.464257	IO II	8 4
_ 15	7 42 19.49	11.39	20 51 30.6	30.4	1.464521	10 3	8 4
17	7 42 8.10		20 52 1.0	_	1.464800	9 55	8 4
19	7 41 57.07	- 11.03	4-20 52 30.6	+29.6	1.465094	9 47	8 4
21	7 41 46.42	10.65	20 52 59.2	28.6	1.465403	9 39	8 4
23	7 41 36.15	10.27	20 53 26.9	27.7	1.465725	9 31	8 4
25	7 41 26.29	9.86	20 53 53.6	26.7	1.466062	9 23	8 4
27	7 41 16.85	9-44	20 54 19.3	25.7	1.466412	9 23	8 4
	/ 41 10.05	- 9.o r		1-24.6	1.400412	9 14	'
März 1	7 41 7.84	8.56	+-20 54 43.9	23.6	1.466774	9 6	8 4
3	7 40 59.28	8.10	20 55 7.5	22.5	1.467148	8 58	8 4
5	7 40 51.18	7.62	20 55 30.0	21.4	1.467535	8 50	8 4
7	7 40 43.56	7.14	20 55 51.4	20.2	1.467933	8 42	8 4
9	7 40 36.42		20 56 11.6		1.468340	8 34	8 4
11	7 40 29.78	- 6.64	+20 56 30.6	+19.0	1.468757	8 26	8 4
13	7 40 23.65	6.13	20 56 48.4	17.8	1.469184	8 18	8 4
_	7 40 18.04	5.61		16.6	1.469620	8 11	8 4
15		5.09	20 57 5.0	15.3			8 4
17	1	4.55	20 57 20.3	14.1	1.470063		,
19	7 40 8.40	1	20 57 34.4		1.470514	7 55	8 4

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	$\text{Log. }\Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
März 17	7 40 12.95		+20 57 20.3	"	1.470063	8 ^h 3 ^m	8 ^h 4 ^m
19	7 40 8.40	- 4.55	20 57 34.4	+14.1	1.470514	7 55	8 4
21	7 40 4.38	4.02	20 57 47.2	12.8	1.470971	7 47	8 4
23	7 40 0.91	3-47	20 57 58.8	11.6	1.471435	7 39	8 4
25	7 39 58.00	2.91	20 58 9.0	10.2	1.471904	7 31	8 4
		- 2.36	_	+ 8.9		1	' '
27	7 39 55.64	1.81	+20 58 17.9	7.7	1.472379	7 23	8 4
29	7 39 53.83	1.24	20 58 25.6	6.3	1.472859	7 15	8 4
31	7 39 52.59	0.67	20 58 31.9	4.9	1.473343	7 7	8 4
April 2	7 39 51.92	- 0.11	20 58 36.8	3.5	1.473830	6 59	8 5
4	7 39 51.81	+ 0.46	20 58 40.3	+ 2.2	1.474320	6 51	8 5
6	7 39 52.27		+20 58 42.5	-I- 0.8	1.474812	6 43	8 5
8	7 39 53.31	1.60	20 58 43.3		1.475306	6 35	8 5
10	7 39 54.91		20 58 42.8	- 0.5	1.475800	6 28	8 5
12	7 39 57.08	2.17	20 58 40.9	1.9	1.476295	6 20	8 5
14	7 39 59.81	2.73	20 58 37.6	3-3	1.476790	6 12	8 5
16	7 40 3.11	+ 3.30	+20 58 33.0	— 4.6	1.477284	6 4	8 4
18	7 40 6.97	3.86	20 58 27.0	6.0		1 :	8 4
20	7 40 11.39	4.42	20 58 19.7	7•3	1.477776 1.478266		8 4
20	7 40 11.39	4.96	20 58 11.0	8.7	1.478755		8 4
24	7 40 21.86	5.51	20 58 11.0	10.0		5 41	8 4
•	7 40 21.00	+ 6.04	20 30 1.0	-11.3	1.479241	5 33	·
26	7 40 27.90	6.58	-1-20 57 49.7	12.6	1.479723	5 25	8 4
28	7 40 34.48	7.11	20 57 37.1	13.9	1.480200	5 17	8 4
30	7 40 41.59	7.63	20 57 23.2	15.3	1.480673	5 10	8 4
Mai 2	7 40 49.22	8.15	20 57 7.9	16.6	1.481141	5 2	8 4
4	7 40 57.37	+ 8.65	20 56 51.3	-17.8	1.481604	4 54	8 4
6	7 41 6.02	9.15	+20 56 33.5	19.1	1.482061	4 46	8 4
8	7 41 15.17	9.13	20 56 14.4	20.4	1.482511	4 38	8 4
10	7 41 24.81	10.13	20 55 54.0	21.6	1.482954	4 31	8 4
12	7 41 34.94	10.60	20 55 32.4	22.8	1.483389	4 23	8 4
14	7 41 45.54		20 55 9.6		1.483817	4 15	8 4
16	7 41 56.59	+11.05	+20 54 45.7	-23.9	1.484237	4 8	8 4
18	7 42 8.09	11.50	20 54 20.6	25.1	1.484648	4 0	8 4
20	7 42 20.02	11.93	20 53 54.3	26.3	1.485049	3 52	8 4
22	7 42 32.37	12.35	20 53 26.9	27.4	1.485441	3 45	8 4
24		12.76	20 52 58.4	28.5	1.485823		8 4
•		-1-13.16	1	29.6		3 37	_ '
26	7 42 58.29	13.56	1-20 52 28.8	30.7	1.486195	3 29	8 4
28	7 43 11.85	13.93	20 51 58.1	31.8	1.486557	3 22	8 4
30	7 43 25.78	14.30	20 51 26.3	32.8	1.486907	3 14	8 4
Juni 1	7 43 40.08	14.65	20 50 53.5	33.9	1.487247	3 6	8 4
3	7 43 54.73		20 50 19.6		1.487575	2 59	8 4

o ^h Mittl.	Zeit	AR.	Diff.	Dekl.	Diff.	$\text{Log. }\Delta$	Östi. Stunden- Winkel	Halber Tag- bogen
Juni		h m s		1.00 50 50 5		T 4 9 FO 4 F	3 6	8 ^h 4 ^m
oum	1	7 43 40.08	+14.65	+20 50 53.5	-33.9	1.487247		0
	3	7 43 54.73	15.00	20 50 19.6	34.8	1.487575	2 59	
	5	7 44 9.73	15.32	20 49 44.8	35.7	1.487891	2 51	8 3
	7	7 44 25.05	15.63	20 49 9.I	36.7	1.488194	2 43	,
	9	7 44 40.68	+15.93	2 0 48 32. 4	-37.5	1.488485	2 36	8 3
	11	7 44 56.61	16.21	+20 47 54.9	38.4	1.488763	2 28	8 3
	13	7 45 12.82	16.47	2 0 47 16.5	39.2	1.489028	2 21	8 3
	15	7 45 29.29	16.73	20 46 37.3	40.0	1.489280	2 13	8 3
	17	7 45 46.02	16.96	20 45 57.3	40.8	1.489519	2 5	8 3
	19	7 46 2.98		20 45 16.5		1.489744	1 58	8 3
	21	7 46 2 0.17	+17.19	120 44 250	-41.5	1.489955	1 50	8 3
		7 46 37.57	17.40	+20 44 35.0 20 43 52.8	42.2	1.490152)
	23		17.59	20 43 52.0	42.8			,
	25	7 46 55.16	17.77		43-5	1.490335	33	7
	27	7 47 12.93	17.94	20 42 26.5	44.1	1.490504	I 27	
	29	7 47 30.87	+18.08	20 41 42.4	-44.7	1.490658	I 20	8 3
Juli	I	7 47 48.95	18.22	+20 40 57.7	45.2	1.490797	1 12	8 2
	3	7 48 7.17	18.34	20 40 12.5		1.490922	1 5	8 2
	5	7 48 25.51	18.44	20 39 26.8	45.7 46.1	1.491032	0 57	8 2
	7	7 48 43.95	18.53	20 38 40.7	46.6	1.491126	0 49	8 2
	9	7 49 2.48	+18.60	20 37 54.1	-47.0	1.491205	0 41	8 2
	11	7 49 21.08	18.65	+20 37 7.1	47.3	1.491269	0 34	8 2
	13	7 49 39.73	18.70	20 36 19.8	47.5	1.491318	0 27	8 2
	15	7 49 58.43	18.72	20 35 32.3	47.8	1.491352	0 19	8 2
	17	7 50 17.15	18.73	20 34 44.5	48.1	1.491370	0 11	8 2
	19	7 50 35.88	- j -18.72	20 33 56.4	-48.2	1.491373	0 4	8 2
	21	7 50 54.60	18.70	+20 33 8.2	48.3	1.491361	23 56	8 2
	23	7 51 13.30	18.66	20 32 19.9	48.4	1.491334	23 49	8 1
	25	7 51 31.96	18.61	20 31 31.5	48.6	1.491291	23 41	8 1
	27	7 51 50.57	18.53	20 30 42.9	48.5	1.491233	23 34	8 I
	29	7 52 9.10	4-18.45	20 29 54.4	-48.5	1.491160	23 26	8 т
	31	7 52 27.55		+20 29 5.9		1.491071	23 19	8 1
Aug.	-	7 52 45.90	18.35	20 28 17.5	48.4	1.490967	23 11	8 ı
O	4	7 53 4.13	18.23	20 27 29.2	48.3	1.490848	23 3	8 I
	6	7 53 22.23	18.10	20 26 41.1	48.1	1.490714	22 56	8 I
	8	7 53 40.17	17.94	20 25 53.3	47.8	1.490565	22 48	8 I
	IO	7 53 57.95	+17.78	+20 25 5.8	47-5	1.490402	22 41	8 1
	12	7 54 15.54	17.59	20 24 18.5	47.3	1.490224	22 33	8 1
	14	7 54 32.93	17.39	20 23 31.6	46.9	1.490031	22 25	8 0
	16	7 54 50.12	17.19	20 22 45.1	46.5	1.489824	22 18	8 0
	18	7 55 7.08	16.96		46.0	1.489604	22 10	80
	10	1 / 55 7.00		20 21 59.1		1.409004	42 10	0.0

o ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 16	7 54 50.12		+20°22, 45.I	"	1.489824	22 18 ^m	8 o ni
18		+-16.96	20 21 59.1	46.0	1.489624	22 10	8 0
20	7 55 7.08 7 55 2 3.81	16.73	20 21 13.5	45.6	1.489370		8 0
22		16.48	20 20 28.5	45.0	1.489122		8 0
		16.21	,	44-4	1.488861	22	8 0
24	7 55 56.50	-1-15.93	20 19 44.1	-43.8	·		
26	7 56 12.43	15.63	+20 19 0.3	43.1	1.488586	21 40	8 0
28	7 56 28.06	15.32	20 18 17.2	42.5	1.488298	21 32	8 0
30	7 56 43.38	15.00	20 17 34.7	41.6	1.487997	21 25	8 0
Sept. 1	7 56 58.38	14.66	20 16 53.1	40.8	1.487684	21 17	8 0
3	7 57 13.04		20 16 12.3		1.487359	21 9	8 0
5	7 57 27-34	-1-14.30	+20 15 32.3	-40.0	1.487021	21 2	8 0
7	7 57 41.27	13.93	20 14 53.2	39.1	1.486672	20 54	7 59
9	7 57 54.81	13.54	20 14 15.1	38.1	1.486312	20 46	7 59
11	7 58 7.97	13.16	20 13 38.0	37.1	1.485941	20 39	7 59
13	7 58 20.72	12.75	20 13 30.0	36.0	1.485560	20 31	7 59
_		-1-12.34	20 13 2.0	-35.0		20 31	
15	7 58 33.06	11.92	+20 12 27.0	33.9	1.485169	20 23	7 59
17	7 58 44.98	11.47	20 11 53.1	32.7	1.484768	20 16	7 59
19	7 58 56.45	11.03	20 11 20.4	31.6	1.484358	20 8	7 59
21	7 59 7.48	10.57	20 10 48.8	30.4	1.483938	20 0	7 59
23	7 59 18.05	- -10.10	20 10 18.4	- 29.1	1.483510	19 52	7 59
25	7 59 28.15		+20 9 49.3	,	1.483074	19 45	7 59
27	7 59 37.78	9.63	20 9 21.5	27.8	1.482630	19 37	7 59
29	7 59 46.91	9.13	20 8 55.0	26.5	1.482179	19 29	7 59
Okt. i	7 59 55.54	8.63	20 8 29.9	25.1	1.481721	19 22	7 59
3	8 0 3.65	8.11	20 8 6.3	23.6	1.481257	19 14	7 59
5	8 0 11.25	+ 7.60	+20 7 44.1	-22.2	1.480787	19 6	7 59
7	8 0 18.33	7.08	20 7 23.3	20.8	1.480311	18 58	7 59
	8 0 24.87	6.54	20 7 4.I	19.2	1.479831	18 50	7 59
9	8 0 30.88	6.01	20 6 46.4	17.7	1.479348		
	8 0 36.34	5.46		16.2	1.478861	18 43	
13		+- 4.92	20 6 30.2	-14.7	1.4/0001		
15	8 0 41.26	4.37	+20 6 15.5	13.1	1.478370	18 27	7 58
17	8 0 45.63	3.81	20 6 2.4	11.5	1.477877	18 19	7 58
19	8 0 49.44		20 5 50.9	10.0	1.477382	18 11	7 58
21	8 0 52.69	3.25 2.69	20 5 40.9	8.4	1.476886	18 4	7 58
23	8 0 55.38	+ 2.12	20 5 32.5	- 6.7	1.476389	17 56	7 58
25	8 0 57.50		+20 5 25.8		1.475891	17 48	7 58
27	8 0 59.05	1.55	20 5 20.8	5.0	1.475394	17 40	7 58
29	8 I 0.03	0.98	20 5 17.4	3.4	1.474898	17 32	7 58
29 3I	8 I 0.43	+ 0.40	20 5 15.6	1.8	1.474403	17 24	7 58
Nov. 2	8 I 0.25	0.18	20 5 15.5	- o.1	1.473911	17 17	7 58
			7- 7-79		-14/37**	-//	1)

		wanrer	geozentris	cher (7 L U.		
Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	${\rm Log.} \Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Okt. 31 Nov. 2 4 6 8	8 i 0.43 8 i 0.25 8 0 59.51 8 0 58.21 8 0 56.34 8 0 53.91	0.18 0.74 1.30 1.87 - 2.43	+2° 5 15.6 20 5 15.5 20 5 17.1 20 5 20.3 20 5 25.2 +2° 5 31.7	- 0.1 -+ 1.6 3.2 4.9 + 6.5	1.474403 1.473911 1.473422 1.472937 1.472454	17 24 17 17 17 17 17 19 16 53 16 45	7 58 7 58 7 58 7 58 7 58 7 58 7 58
12 14 16 18	8 0 50.92 8 0 47.39 8 0 43.32 8 0 38.71 8 0 33.56	2.99 3.53 4.07 4.61 — 5.15	20 5 39.8 20 5 49.5 20 6 0.8 20 6 13.7 +20 6 28.1	8.1 9-7 11.3 12.9	1.471506 1.471040 1.470580 1.470127 1.469683	16 37 16 29 16 21 16 13	7 58 7 58 7 58 7 58 7 58 7 58
22 24 26 28	8 0 27.88 8 0 21.69 8 0 14.99 8 0 7.79	5.68 6.19 6.70 7.20 - 7.68	20 6 44.0 20 7 1.4 20 7 20.4 20 7 40.8	15.9 17.4 19.0 20.4 +21.8	1.469247 1.468819 1.468401 1.467994	15 57 15 49 15 41 15 33	7 59 7 59 7 59 7 59
Dez. 2 4 6 8	7 59 51.95 7 59 43.33 7 59 34.27 7 59 24.78	8.16 8.62 9.06 9.49 — 9.90	20 8 25.8 20 8 50.3 20 9 16.1 20 9 43.1	23.2 24.5 25.8 27.0	1.467598 1.467212 1.466838 1.466477 1.466129	15 25 15 17 15 9 15 1 14 53	7 59 7 59 7 59 7 59 7 59
10 12 14 16 18	7 59 14.88 7 59 4.58 7 58 53.89 7 58 42.84 7 58 31.43	10.30 10.69 11.05 11.41	+ 20 10 11.4 20 10 40.8 20 11 11.3 20 11 42.8 20 12 15.4	29.4 30.5 31.5 32.6 +33.5	1.465794 1.465473 1.465166 1.464874 1.464596	14 45 14 37 14 29 14 21 14 13	7 59 7 59 7 59 7 59 7 59
20 22 24 26 28	7 58 19.69 7 58 7.64 7 57 55.29 7 57 42.67 7 57 29.80	12.05 12.35 12.62 12.87	+20 12 48.9 20 13 23.3 20 13 58.5 20 14 34.5 20 15 11.3	34·4 35·2 36·0 36.8 +37·4	1.464334 1.464089 1.463860 1.463647 1.463451	14 5 13 57 13 48 13 40 13 32	7 59 7 59 7 59 7 59 7 59
30 32 34	7 57 16.70 7 57 3.38 7 56 49.87	13.32	+20 15 48.7 20 16 26.7 20 17 5.1	38.0 38.4	1.463273 1.463113 1.462970	13 24 13 16 13 8	8 0 8 0

MERKUR 1913.

Mittlere Ekliptik und Äquinoktium 1910.0.

	AVI 11	ttlere .	вкир	tik un	a Aqu	111	oktiur	n 19 1 0.0). 	
Oh Mittl. Zeit	Log. Rad. v.	Länge in d.Bahn	Red. a. d.Ekl.	Breite	O ^h Mittl. Ze	eit	Log. Rad. v.	Länge in d.Balın	Red. a. d.Ekl.	Breite
Jan. 1 6 11 16	9.6144 9.6380 9.6550 9.6653	19.1 51 211 36 226 51 241 10	+12 + 7 0 - 6	+3°45° +1°53 +0°3° -1°41°	:	5 10 15 20	9.6523 9.6638 9.6688 9.6673	224° 5 238 32 252 27 266 15 280 22	+ 1	+0°23' -1°22 -2°58 -4°24
26 31 Febr. 5 10	9.6690 9.6662 9.6569 9.6410 9.6183 9.5894	255 2 268 52 283 5 298 10 314 39 333 13	$ \begin{array}{r} -11 \\ -13 \\ -12 \\ -8 \\ -1 \\ +7 \end{array} $	-3 15 -4 39 -5 47 -6 37 -7 0 -6 44	$\Lambda \mathrm{ug}.$	25 30 4 9 14	9.6445 9.6230 9.5952 9.5624 9.5281	295 14 311 25 329 32 350 24 14 48	$ \begin{array}{c c} -12 \\ -9 \\ -3 \\ +5 \\ +12 \\ +12 \end{array} $	-5 36 -6 29 -6 58 -6 51 -5 52 -3 45
20 25 März 2 7	9.5559 9.5221 9.4962 9.4880 9.5015	354 41 19 49 48 45 80 8 111 7	+12 +11 - 1 -12 -10	-5 33 -3 13 +0 11 +3 48 +6 17	Sept.	24 29 3 8	9.5000 9.4879 9.4975 9.5243 9.5583	43 4 74 11 105 28 134 10 159 1	+ 2 -10 -12 - 1 + 9	-0 31 +3 10 +5 57 +7 0 +6 30
17 22 27 April 1 6	9.53°4 9.5647 9.5973 9.6247 9.6457	139 8 163 16 183 55 201 53 217 56	+ I +I0 +I3 +I0 + 4	+7 ° +6 17 +4 48 +3 ° +1 8		18 23 28 3 8	9.5916 9.6201 9.6423 9.6578 9.6665	180 16 198 40 215 2 230 2 244 13	+13 +11 + 5 - 1 - 7	+5 7 +3 21 +1 29 -0 20 -2 2
11 16 21 26 Mai 1	9.6600 9.6676 9.6687 9.6633 9.6513	232 45 246 50 260 38 274 34 289 5	- 2 - 8 -12 -13 -11	-0 40 -2 20 -3 51 -5 8 -6 10		13 18 23 28	9.6690 9.6648 9.6540 9.6366 9.6125	258 3 271 55 286 17 301 37 318 30	-11 -13 -11 - 7 + 1	-3 35 -4 55 -6 0 -6 45 -7 0
6 11 16 21 26	9.6326 9.6073 9.5762 9.5418 9.5100	4 25	$ \begin{array}{r} -6 \\ +2 \\ +10 \\ +13 \\ +7 \end{array} $	-6 50 -6 59 -6 23 -4 45 -1 56		7 12 17 22 27	9.5823 9.5483 9.5154 9.4926 9.4892	337 38 359 51 25 50 55 29 87 3	+ 8 +13 + 9 - 4 -13	-6 34 -5 9 -2 33 +1 0 +4 29
Juni 5 10 15 20	9.5442	92 56 122 56 149 2 4	$ \begin{array}{c c} -6 \\ -13 \\ -6 \\ +5 \\ +12 \end{array} $	+1 42 +5 0 +6 47 +6 51 +5 45	Dez.	2 7 12 17 22	9.5068 9.5377 9.5722 9.6038 9.6300	117 33 144 44 168 3 188 2 205 32	$ \begin{array}{c c} -8 \\ +3 \\ +11 \\ +13 \\ +9 \end{array} $	+6 35 +6 57 +6 1 +4 25 +2 35
²⁵ 30 Juli 5	1 /	208 36	+12 + 8 + 1	+4 5 +2 14 +0 23		27 32 37	9.6494 9.6622 9.6684	221 16 235 52 249 51	+ 3 - 4 - 9	+0 44 -1 3 -2 41

 $\Omega = 47^{\circ} \text{ rs}'.6; \quad i = 7^{\circ} \text{ o}'.17; \quad m = \frac{r}{6000000}$

	V	ENUS 19	13.	220	ERDE	1913.
Mi	ttl. Eklip	tik und Ž	quin.	1910.0.	Mittl. Äq	
O ^b Mittl. Zeit	Log. Radius v.	Länge in der Bahn	Red. auf d. Eklipt.	Breite	Log. Radius vect.	Länge
Jan4	9.86021	22° 36.7	+2.9	-2°43.1	9.99268	95 [°] 19.7
6		38 35.9	+2.9	$-2 \ 3.2$	9.99268	105 31.3
16		54 38.6	+2.0	—т 13.7	9.99287	115 42.8
26		70 45.0	+0.5	0 18.1	9.99329	125 53.1
Febr. 5		86 54.5	-1.1	+0 39.0	9.99394	136 2.1
15	9.85670	103 6.5	-2.5	+1 33.2	9.99474	146 9.2
25		119 20.2	-3.0	+2 20.1	9.99570	156 13.5
März 7		135 34.6	-2.6	+2 55.8	9.99682	166 15.1
17		151 48.7	-1.4	+3 17.5	9.99798	176 13.7
27	1	168 1.4	+0.2	+3 23.5	9.99922	186 8.6
April 6	9.85758	184 11.9	+1.8		0.00049	196 0.4
16	9.85831	200 19.4	+2.8	+2 47.8	0.00170	205 48.8
26		216 23.4	+3.0	+2 9.4	0.00287	215 33.7
Mai 6	9.85994	232 23.8	-⊢2.2	+1 21.0	0.00397	225 15.8
16	9.86072	248 20.7	+0.8	+0 26.6	0.00492	234 55.1
2 6	9.86138	264 14.3	0.9	-0 2 9.7	0.00574	244 31.9
Juni 5	9.86189	280 5.4	-2.3	—I 23.5	0.00641	254 6.9
15	9.86220	295 54.6	-3.0	- 2 11.0	0.00685	263 40.5
25	9.86230	311 43.0	2.8	-2 48.5	0.00713	273 12.8
Juli 5	9.86217	327 31.4	-r.8	—3 тз. з	0.00722	282 44.9
15	9.86182	343 20.9	-0.3	-3 23.4	0.00707	292 17.1
25	9.86128	359 12.4	+1.4	3 18.1	0.00674	301 49.6
Aug. 4	9.86058	15 6.6	+2.6	2 57.6	0.00623	311 23.7
14	9.85979	31 4.0	+3.0	2 23.4	0.00550	320 59.1
2.1	9.85896	47 5.1	+2.5	-r 38.0	0.00465	330 36.5
Sept. 3	9.85816	63 9.8	+1.3	0 44.7	0.00366	340 16.8
13	9.85745	79 17.9	0.3	+0 I2.2	0.00253	349 59.6
23	9.85688	95 28.9	1.9	+1 8.3	0.00135	359 45.5
Okt. 3	9.85650	111 42.1	-2.9	+1 59.2	0.00012	9 35.0
13	9.85635	127 56.4	-2.9	+2 40.6	9.99885	19 27.6
23	9.85643	144 10.9	-2.T	+3 9.2	9.99764	29 23.6
Nov. 2	9.85675	160 24.4	0.6	+3 22.7	9.99649	39 23.1
12	9.85727	176 36.1	+1.I	-+3 20.1	9.99541	49 25.5
22	9.85794	192 45.1	+2.4	+3 1.6	9.99450	59 30.6
Dez. 2	9.85872	208 50.9	+3.0	+2 28.9	9.99375	69 38.3
12	9.85955	224 53.0	-+2.7	+1 44.7	9.99315	79 47.7
22	9.86036	240 51.5	+1.5	+0 52.7	9.99281	89 58.3
32	9.86109	256 46.6	-0.1	- ○ 3.3	9.99267	100 9.9
Ω =	75° 51′.7;	$i=3^{\circ}23'$.6; m =	I	m = -	1
				408000	3	29390

MARS 1913.

Mittlere Ekliptik und Äquinoktium 1910.0.

Mittl. Zeit	Log. Radius vect.	Länge in der Bahn	Red. auf die Ekliptik	Breite
Jan4	0.17565	249 18.3	-0.6	o°38.8
6	0.17188	254 44.7	-0.7	-0 48.5
16	0.16815	260 17.0	0.8	57.9
26	0.16449	265 54.9	0.9	I 6.9
Febr. 5	0.16094	271 38.5	-0.9	—r 15.4
15	0.15754	277 27.6	-0.9	-I 23.3
25	0.15434	283 22.1	—o.8	-I 30.4
März 7	0.15138	289 21.6	-0.8	- 1 36.6
17	0.14870	295 25.8	-0.7	-141.8
27	0.14633	301 34.3	0.5	—I 46.0
April 6	0.14432	307 46.6	-0.3	-1 48.9
16	0.14270	314 1.9	-O.I	-150.6
26	0.14149	320 19.7	0.0	-1 51.0
Mai 6	0.14072	326 39.3	+0.2	1 50.0
16	0.14039	332 59.8	+0.4	—1 47.7
26	0.14052	339 20.5	+0.6	-1 44.0
Juni 5	0.14110	345 40.5	+0.7	- r 39.0
15	0.14212	351 59.2	+0.8	—т 32. 9
25	0.14357	358 15.7	0.9	- I 25.8
Juli 5	0.14541	4 29.4	+0.9	-1 17.6
15	0.14762	10 39.6	-+0.9	_ r 8.6
25	0.15617	16 45.7	+0.8	- o 5 9. 0
Aug. 4	0.15301	22 47.4	+0.7	o 48.8
14	0.15611	28 44.1	+0.6	−0 38.2
2.1	0.15943	34 35.6	+0.4	—о 27.3
Sept. 3	0.16291	40 21.6	+0.3	—o 16.4
13	0.16652	46 2.0	+0.I	-0 5.5
23	0.17023	51 36.7	-0.1	+0 5.3
Okt. 3	0.17398	57 5.7	-0.3	+0 15.9
13	0.17775	62 29.1	-0.4	+0 26.2
23	0.18149	67 46.9	-0.5	+0 36.0
Nov. 2	0.18518	72 59.3	-o.7	+0 45.4
12	ಂ.18880	78 6.5	-0.8	+0 54.2
22	0.19231	83 8.7	-0.8	+1 2.5
Dez. 2	0.19568	88 6.1	-0.9	+1 10.2
12	0.19891	92 59.1	-0.9	+1 17.3
22	0.20197	97 47.8	-0.9	+123.7
32	0.20485	102 32.6	0.9	+1 29.4

 $\Omega = 48^{\circ} 51'.2; \quad i = 1^{\circ} 51'.0; \quad m = \frac{1}{3093500}$

JUPITER 1913.

Mittlere	Ekliptik	und	Äquinoktium	1910.0.
----------	----------	-----	-------------	---------

O ^h Mittl. Zeit	Log. Radius vect.	Länge in der Balın	Red. auf die Ekliptik	Breite	B.
Jan 4	0.720893	267° 14' 47.7	+11.2	16 41.7	-11
6	,	268 3 34.1	+10.5	+0 15 36.3	-1.5
16 2 6	0.720313	268 52 24.5	+ 9.8	+0 14 30.6	-1.5 -1.6
Febr. 5	0.719727	269 41 18.8 270 30 17.0	+ 9.1 + 8.4	+0 13 24.6 +0 12 18.4	-1.0
,		, , ,	'	TO 12 10.4	-1./
15	0.719433	271 19 19.2	+ 7.6	+0 11 11.9	-1.7
25	0.719138	272 8 25.4	+ 6.9	+0 10 5.2	-1.8
März 7	0.718841	272 57 35.6	+ 6.2	+0 8 58.3	-1.8
17	0.718544	273 46 49.9	+ 5.4	+0 7 51.2	-1.8
27	0.718245	274 36 8.3	+ 4.6	+0 6 44.0	1.8
April 6	0.717946	275 25 30.7	+ 3.8	+0 5 36.6	-1.8
16	0.717646	276 14 57.2	-+ 3.I	+0 4 29.0	-1.9
26	0.717346	277 4 27.8	+ 2.3	+0 3 21.2	-1.9
Mai 6	0.717045	277 54 2.6	+ 1.6	+0 2 13.2	-1.9
16	0.716743	278 43 41.5	+ 0.8	+0 1 5.1	-2.0
26	0.716441	2 79 33 2 4.5	0.0	-0 0 3.I	- 2.0
Juni 5	0.716138	280 23 11.7	- 0.8	—о I II.3	-2.1
15	0.715835	281 13 3.1	— 1.6	-o 2 19.6	-2.1
25	0.715532	282 2 58.6	- 2.4	-0 3 28.0	- 2.2
Juli 5	0.715228	282 52 58.4	- 3.2	-0 4 36.4	-2.2
15	0.714921	283 43 2.3	- 3.9	-0 5 44.9	-2.2
25	0.714620	284 33 10.4	- 4.7	-0 6 53.4	-2.2
Aug. 4	0.714315	285 23 22.7	- 5.4	-0 8 I.9	- 2.2
14	0.714011	286 13 39.2	-6.2	0 9 10.4	-2.2
24	0.713707	287 4 0.0	- 7.0	0 10 18.9	2.3
Sept 3	0.713403	287 54 25.0	- 7.8	-0 II 2 7.4	2.3
Sept 3	0.713403	288 44 54.2	8.5	-0 11 27.4 -0 12 35.7	-2.4
23	0.712795	289 35 27.7	9.3	-0 13 44.0	-2.4
Okt. 3	0.712492	290 26 5.4	— to.0	-0 I4 52.2	-2.5
13	0.712189	291 16 47.3	-10.7	-0 16 0.4	-2.6
	' '				
Nov. 2	0.711887	2 92 7 33.5	11.4	-0 17 8.4	-2.7
	0.711585	292 58 23.9	12.1	-0 18 16.3	-2.7
12	0.711283	293 49 18.5	-12.8	-0 19 24.0	-2.8 -2.8
Dez. 2	0.710983	294 40 17.4 295 31 20.6	13.5	-0 20 31.6	2.8
	0.710683		14.2	-0 2 I 3 9.0	
12	0.710384	296 22 28.0	-14.9	-0 22 46.2	-2.8
22	0.710085	297 13 39.6	-15.6	-0 2 3 53.3	-2.8
32	0.709788	2 98 4 55.4	-16.2	0 25 O.I	-2.8
42	0.709492	298 56 15.4	-16.8	-0 2 6 6.6	-2.9

 $\Omega = 99^{\circ} 32^{i} 41^{i}.4; \quad i = 1^{\circ} 18^{i} 29^{i}.7; \quad m = \frac{1}{1047.355}$

148 HELIOZENTR. PLANETENKOORDINATEN.

M	ittlere Ekli	ptik und Ä	quinoktiur	n 1910.0.	
O ^h Mittl. Zeit	Log. Radius vect.	Länge in der Bahn	Red. auf die Ekliptik	Breite	Bo
		SATURN 1	913.		
1912 Dez. 7	0.957975	61° 3′ 59.8	+94.9	$-1^{\circ}57^{'}32.2$	-2.2
1913 Jan. 16	0.957685	62 32 30.5	+95.9	-I 55 7.I	-2.3
Febr. 25	0.957407	64 1 8.3	+96.7	-I 52 37.2	2.4
April 6	0.957143	65 29 52.9	+97.2	-I 50 2. 7	-2.1
Mai 16	0.956893	66 58 43.9	+97.5	-14723.5	2.5
Juni 25	0.956657	68 27 41.1	+97.5	—I 44 39.8	-2.5
Aug. 4	0.956435	69 56 44.1	-+97.3	-1 41 51.8	-2.6
Sept. 13	0.956227	71 25 52.7	+96.8	— I 38 59.4	-2.6
Okt. 23	0.956034	72 55 6.5	+96.0	-I 36 2.9	-2.7
Dez. 2	0.955856	74 24 25.1	+95.0	—I 33 2 .4	-2.7
42	0.955692	75 53 48.1	+93.7	-I 29 57.9	-2.7
8	} = 112° 52′ 2	$6^{\circ}.8; i = 2^{\circ}.8$	29′ 31″.3; m	$=\frac{1}{3501.6}$	
		URANUS	1913.		
1912 Dez. 7	1.296566	302 56 34.5	-0.2	-°35 9.7	+2.9
1913 Jan. 16	1.296686	303 23 2.5	-9.3 -0.3	-0 35 9.7 -0 35 23.6	+2.0
Febr. 25		5 0 0	-9. 2	9, 9	
April 6	1.296804	303 49 29.7	-9.2 0.2	—○ 35 37·4	+2.0
Mai 16		304 15 56.1	-9.2	-0 35 5I.O	+2.8 +2.8
T .	1.297038	304 42 21.7	-9.2	-0 36 4.5	
A .	1.297154	305 8 46.6	-9.t	-0 36 17.8	+2.8 $+2.8$
0 .	1.297269	305 35 10.6	-9.I	-0 36 31.1	1
	1.297382	306 I 33.9	-9·I	-0 36 44.2	+2.7
1)	1.297494	306 27 56.4	-9.0	-0 36 57.2	+2.7
Dez. 2	1.297604	306 54 18.1 307 20 39.1	9.0 8.9	0 37 10.0 0 37 22.7	+2.0 +2.0
		$i = 0^{\circ} 46^{\circ}$	00'l	r	,
		NEPTUN		228 69	
	1	0 / 2		0 / 0	
1912 Dez. 7	1.476821	114 20 17.2	+27.0	− ○ 3○ 13.5	-1.3
1913 Jan. 16	1.476835	114 34 42.1	+26.6	-0 2 9 47.7	-1.9
Febr. 25	1.476849	114 49 6.8	-+26.2	-0 29 2 1.9	-1.5
April 6	1.476863	115 3 31.5	+25.9	-0 28 56.0	-I.2
Mai 16	1.476877	115 17 56.1	+-25.6	-0 28 3 0. 2	-1.3
Juni 25	1.476892	115 32 20.6	+25.2	-0 2 8 4.3	—ı.:
Aug. 4	1.476906	115 46 45.0	+24.8	—o 27 38.4	I.
Sept. 13	1.476921	116 1 9.4	+24.5	-0 27 12.4	-1.
Okt. 23	1.476936	116 15 33.7	+24.1	-0 26 46.4	-1.3
Dez. 2	1.476952	116 29 57.9	+23.7	-0 26 20.4	-1.
42	1.476967	116 44 22.0	+23.1	0 25 54.4	-ı.
	$\Omega = 130^{\circ}$	47'; i = 1° 46	' 42"; m ==	1	
	00		,,	19314	

Nr.	N a m e	Gr.	A	R.	1913.0	Jährl. Verände rung	be I	ithrl. igen- ew. in tinh. von	Dek	. 19	13.0	Jährl. Verände- rung	Ei be Ei	chrl. gen- w. in inh.
1	a Androm.	2.1	h O	3"	53.244	+3.005	6 +	107	+-28°	36	36.44	+19.882	_	161
2,	β Cassiopejae	2.2										-19.862		180
3	ε Phoenicis	3.8	0			+3.052						+19.849		192
4	[22 Androm.]	5.2	0	5	47.604	+3.107	8 +	8	+45	35		+20.036		3
5	[x2 Sculptoris]	5.5	0	7	9.460	+3.050	5 +	4	28	17	4.11	+20.042	+	6
6	[# Sculptoris]	5.3	0	7	18.601	+3.052	4 +	104	25	37	12.67	+20.160	+	124
7	γ Pegasi	2.7	1			+3.086						+20.017		1.4
8	[Br. 6]	6.5				+3.352						+20.023		2
9	ı Ceti	3.5				+3.056						+19.971		32
10	ζ Tucanae	4.2				+3.145						+21.153		1154
11	β Hydri	2.8	0	21	11.828	+3.203	$_{8}$	6004	-77	11	20.00	+20.278		318
12	α Phoenicis	2.3										+19.545		409
13	12 Ceti	6.1				+3.061						+19.913		8
14	[Ceti 49 G.]	5.3		26		+3.001						+19.926		9
15	[\lambda^1 Phoenicis]	4.7				+2.900						+19.916		12
16	[z Cassiop.]	4.2		28	2 680	+3.386	4 .4.	. 11				+19.899		3
17	ζ Cassiopejae			32		+3.326					_	+19.899		7
18	# Androm.	4.2		-								+19.848		0
19	[* Androm.]	4.3										+19.575		251
20	& Androm.	3.2				+3.201						+19.733		84
		_		-									1	
21	α Cassiopejae	1										+19.776		2 9
22	β Ceti	2.2				+3.012						+19.792	-	39 8
23 25	[η Phoenicis] ο Cassiopejae	4.3				+2.707 $+3.329$						+19.741 +19.735		8
24	21 Cassiopejae	4.7 5.8				+3.901		57			-	+19.720		23
		_			-)	_
26	[\lambda^2 Sculptoris]	5.9	0	39	59.743	+2.903	1 +	178	-38			+19.856		
27	ζ Androm.	4.1				+3.174			_			+19.620		79
28	[5 Piscium]	4.4				+3.109		-				+19.629		46
29	[Br. 82]	5.7				+3.612						+19.649		5
31	[\lambda Hydri]	5.3			J	+2.099			-75	23	49.05	+19.624	_	2 6
30		5.4				+3.004						+19.425		223
32	γ Cassiopejae			-		+3.596						+19.539		4
34												+19.492		
33												+19.570		
35	α Sculptoris	4.1	0	54	24.848	+2.891	8	- 5	-29	49	39.29	+19.478	·	5
36	ε Piscium	4.2	0	58	25.573	3 +3.110	9 -	- 55	+ 7	25	19.13	+19.428	+	30
37		6.2	0	59	20.319	+3.086	ic +	- 8t	+ 0	54	2.42	+19.339	-	39
38		3.2	1			+2.680						+19.297		15
3 9		5.5	1									+19.268		4
40	[η Ceti]	3.3	1	4	12.75	7 + 3.016	9+	- 138	10	38	35.67	7-19.133	3	132

Nr.	Name	Gr.	A	ℝ.	1913.0	Jährl. Verände- rung	Ei be E	hrl. gen- w. in inh. on	Dekl	. 19	013.0	Jährl. Verände- rung	Jährl. Eigen- bew. iu Einh. von o".001
41 42	[44 II. Ceph.] β Androm.	5.7 2.1	I I			+5.0597 +3.3505		331 151	+-79° -1-35			+19.261 +19.136	
43	[τ Piscium]	4.3	1	6	51.888	+3.2967	+	56.	+29	37		+19.157	
44	[Sculpt. 102 G.]	6.0	1			+2.7644		39	38			+19.123	- 27
45	υ Piscium	4.6	1	14	40.838	+3.2902	+-	15	+26	48	25.32	-+18.980	— 11
47	ϑ Ceti	3.4				+2.9979		55				+18.632	214
46	[ψ Cassiop.]	5.0				+4.1960						+18.876	+ 33
48	δ Cassiopejae	2.7				+3.8982						+18.791	- 43
49	[y Phoenicis]	3.2				+2.6070		38				+18.478	
50	η Piscium	3.6	i			+3.2056	ĺ	15	ŀ			+18.617	- 7
51	40 Cassiopejae					+4.7286		19				+18.462	- 6
52	υ Persei	3.6		_		+3.6666		64				+18.317	
53	[Hydri 14 G.]	6.3	I			+0.3636 +2.2385		69 122				+18.288 +18.329	
54 55	43 Cassiopejae	5.9				+4.3987		88				+18.316	
											_		
56	[ν Piscium] φ Persei	4.5 4.1				+3.1194 +3.7428		16 26	+ 5			+18.282 $+18.219$	
57 58	[Sculpt. 129 G.]					+2.6442		58				+18.210	
59	T Ceti	3.4		40		+2.7868						+19.018	
60	o Piscium	4.3				+3.1645		47				+18.188	
61	Lac. & Sculpt.	5.3				+2.8093		99				+18.034	
62	ζ Ceti	3.5	I		-	+2.9603		22				+17.860	
64	α Triang.	3.5		48		+3.4125		II				+17.624	
63	ε Cassiopejae		1	48		+4.2821	(50				+17.841	
65	ξ Piscium	4.6	I	49	2.997	+3.1034	+	13				+17.838	
66	β Arietis	2.7	J.	49	49.828	+3.3081	+	65	+20	22	59.37	+17.679	-109
67	Phoenicis .	4.5		50	- /	+2.4068	1	95				+17.673	
68	χ Eridani	3.6	I	52	34.312	+2.3358	+		-52	_	_	+17.947	
69	[η² Hydri]	4.7				+1.5165		119	-68	4		+17.749	
70	50 Cassiopejae	4.0	1	55	58.778	+5.0573	-	91	+72	0	3.38	+17.558	+ 25
71	υ Ceti	3.9	I	55	54-347	+2.8267	+	91				+17.523	
72	∝ Hydri	2.9		56		+1.8903			6 1	59	34.77	+17.553	+ 21
73		2.1										+17.370	
74		2.0										+17.117	
75		3.0							1			+17.126	
	55 Cassiopejae	6.3				+4.6668						+17.019	
77												+16.840	
	Lac. p. Forn.											16.952	
79												+16.762	
90	67 Ceti	15.0	12	1.2	30.575	+2.9900	+	55	1-0	49	21.00	+16.672	I IO

Nr.	Name	Gr.	AR.	1913.0	Jährl. Verände- rung	Jäl Eig bew Eir vo	en- : z. in nh. m	Dekl	. 19	13.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
81 82 83 84 85	[θ Arietis] [φ Eridani] [α Fornacis] [λ Horologii] ξ² Ceti	5.7 3.5 5.4 5.5 4.2	2 13 2 18 2 22	24.041 33.695 27.917	+3.3316 +2.1433 +2.7452 +1.6762 +3.1862	++	81	-51 -24	54 12 42	52.83 40.65 4.17	+16.749 +16.709 +16.430 +16.158 +16.237	-36 -63
86 88 87 90 89	[z Eridani] [λ¹ Fornacis] 36 II. Cassiop. μ Hydri ν Arietis	4.I 6.0 5.4 5.5 5.6	2 29 2 29 2 33	29.286 44.030 29.314	+2.1982 +2.4996 +5.6332 -1.3512 +3.4006	+	43 €0 474 9		1 26 29	56.58 19.12 20.64	+16.205 +15.898 +15.939 +15.684 +15.679	+ 2I - 32
91 92 95 93 94	δ Ceti [Br. 366] [ε Hydri] ϑ Persei [35 Arietis]	3.9 6.3 4.0 4.1 4.7	2 38 2 38	19.339 14.807 14.989	+3.0726 +5.1154 +0.9132 +4.0815 +3.5132	+++	169 346	+67 -68 +48	27 38 51	2 0.95 22 .57 40.04		- 29 + 5 - 88
96 97 98 99	[γ Ceti] π Ceti μ Ceti [η Persei] 41 Arietis	3.4 4.0 4.2 3.8 3.6	2 39 2 40 2 44	58.884 14.200 20.436	+3.1056 +2.8540 +3.2392 +4.3549 +3.5244	+	8	-14	13 44 32	35.99 50.44 6.58	+15.275 +15.348 +15.312 +15.099 +14.966	- 9 - 31 - 11
101 102 103 104 105	β Fornacis τ² Eridani τ Persei η Eridani 47 H. Cephei	4.4 4.8 4.0 3.7 5.8	2 45 2 47 2 48 2 52	26.941 5.516 4.835 10.577	+2.5103 +2.7205 +4.2348 +2.9293 +7.8379	+ + + +	39	-2I +52	21 24 14	44.22 25.75 38.07	+14.920 +14.920 +14.891 +14.432	-29 -218
106 107 108 109	 θ Eridani α Ceti γ Persei ρ Persei μ Horologii 	2.9 2.5 3.0 (3.8) 5.1	2 54 2 57 2 58 2 59	57.662 43.779 3 29.182 3 35.762	+2.2724 +3.1336 +4.3266 +3.8344 +1.4086		68 9 2	-40 + 3 +53 +38	39 44 9 30	10.13 56.32 59.38 13.96	+14.510 $+14.238$ $+14.264$ $+14.096$	+28 -76 -4 -103
113 111 112 114 116		5.7 (2.2 4.1 4.3 5.2	3 6 3 8	2 30.150 2 46.838 5 39.063 8 19.978	+0.1006 +3.8926 3 +4.3132 +3.4254 3 +3.0602	1+2+	1295 106 136	+40 +49 +19	37 16 23 31	16.34 54.10 53.98 15.43	+13.754 +13.589	$ \begin{bmatrix} $
117 115 118 119	[Horol. 38 G.] [e Eridani]	6.1 4.2	3 10 3 10	9 14.217 9 20.732 6 27.230	+2.546 $+7.4912$ $+1.514$ $+2.3958$ $+4.2686$	2 + 5 - 8 +	183 5 2 787	+77 -57 -43	24 38 24	59.76 49.64 8.04	+13.549 +13.512 +13.856	-44 -6 $+735$

Nr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o ⁸ .0001	Dekl. 19	13.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".oo1
121 122 123	o Tauri 2 II. Camelop. [5 Tauri]	3.6 4.4 3.6		0.777 2 7.114	+3.2253 +4.8329 +3.2480	— I + 39	+59 38 + 9 25	17.34 47.69	+12.757 +12.675	+ 6 - 45
124	[σ Persei] f Tauri	4.8 4.1	3 2 4 3 2 6		+4.2165 +3.3084				+12.609 +12.469	+ 23 - 5
126 127 128 130 129	[z Reticuli] z Eridani [Horol. 45 G.] [y Eridani] [Gr. 716]	4.8 3.5 5.8 4.5 5.4	3 283 293 33	49.851 58.899 58.309	+1.0363 +2.8253 +1.7834 +2.1515 +5.1770	-658 + 48 - 16	- 9 45 -50 40 -40 33	8.07 24.48 34.45	+12.713 +12.296 +12.285 +11.902 +11.905	+81
131 133 132 135 134	ð Persei [ð Fornacis] [ø Persei] [ð Eridani] v Persei	3.0 4.9 3.9 3.4 3.9	3 38 3 38 3 39	47.246 51.548 4.771	+4.2589 +2.3849 +3.7554 +2.8725 +4.0660	$ \begin{array}{rrr} - & 5 \\ + & 8 \\ - & 65 \end{array} $	-32 12 + 32 0 - 10 3	57.11 48.07 26.23	+11.695 +11.592 +11.563 +12.311 +11.545	17
	[17 Tauri] [24 Eridani] 5 H. Camelop. 7 Tauri 16 Eridani	4.0 5.4 4.5 3.0 4.1	3 39 3 40 3 41 3 42 3 43	5.286 9.232 18.596	+3.5576 +3.0452 +6.2791 +3.5614 +2.5797	+ 1 + 42 + 18	+23 50	12.94 55.75 12.63	11.483 11.375	- 44 - 8 - 40 - 48 - 519
141 142 143 146 144	β Reticuli [27 Tauri] g Eridani γ Hydri ζ Persei	3.8 3.8 4.1 3.1 2.9	3 46 3 48	59.157 11.893 34.446	+0.7420 +3.5623 +2.2447 -0.9647 +3.7651	+ 14 - 40 +123	+23 47 -36 27 -74 3°	17.28 47.74 21.32		- 45 - 52
145 147 148 149 150	9 H. Camelop. ε Persei ξ Persei γ Eridani λ Tauri	3.0 4.0 3.0	3 52 3 53 3 53	0.667 18.973 58.168	+5.0919 +4.0178 +3.8861 +2.7979 +3.3206	+ 23 + 10 + 43	+39 45 +35 32 -13 45	33.69 29.98 19.64	+10.776 +10.593 +10.516 +10.364 +10.322	- 29 - 8
151 153 152 154 155	ν Tauri [Erid. 174 G.] c Persei o ¹ Eridani α Horologii	5·7 4.0 4.1	4 2 4 2 4 7	2.244 20.414 37.068	+3.1891 +2.4718 4.3454 +2.9272 +1.9854	+148 + 33 + 8	-27 53 +47 28 -7 3	21.56 52.10 49.73	+9.813 $+9.522$	+108 - 32 + 82
156 157 160 158 159	α Reticuli [γ Doradus] υ ⁴ Eridani [54 Persei] [γ Tauri]	4.2 3.3 5.3	4 13 4 14 4 14	44.680 36.042 45.474	+0.7648 +1.5676 +2.2682 +3.8896 +3.4112	+ 88 + 37 - 2 0	-51 42 -34 0 +34 21	20.85 37.01 27.16	+ 9.136 + 8.885 + 8.879	+172 - 12 - 6

Nr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o ⁸ .0001	Dekl. 1	913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".oo1
161 162	[Erid. 212 G.]	5·4 3.8			+ 2 .6180 + 3 .4569					+ 15 - 31
163	[4 Reticuli]				+0.6414				+8.557	+160
164	ε Tauri				+3.5003				+8.155	- 35
166	[ð Mensae]	5.8	4 23	49.789	-4.1476	+ 97	-80 2	6.73	+8.239	+ 72
165	[1 Camel. seq.]	6.3	4 25	8.019	+4.7403	+ 7	+53 43	3 21.99	+8.063	0
167	[8 Caeli]	5.2	4 28		+1.8355				+7.802	- 17
168	a Tauri	1			+3.4399				+7.408	-189
169	v Eridani	3.8	_		+2.9964				+7.507	- 4
171	α Doradus	3.2	4 32	6.989	+1.2949	+ 71	-55 I3	27.68	+7.503	+ 3
170		3.5			+2.3309		30 44			6
172	53 Eridani	3.9	_		+2.7461					- 165
174	τ Tauri	4.2	4 37		+3.5982				+7.081	19
173	Gr. 848	6.2	4 37		+8.0173		+75 4		+6.960	133
175	4 Camelop.	5.5	4 40		+-4.9857				6.648	-146
176		3.8	4 41		+2.9989		— 3 2			12
177		5.5	1		0.6139				+6.561	+ 28
178	9 Camelop.	4.3			+5.9435				+6.421	+ 10
179	[π ⁴ Orionis] π ⁵ Orionis	3.7			+3.1937 +3.1236				+6.306 +6.048	7
		3.7								
181	t Aurigae	2.7			+3.9037				+5.897	- 20
182	1	4 I			+5.3253				+5.541	- 12
183 184	ε Aurigae ι Tauri	(3.2) 4.8			+4.3002 $+3.5843$				+5.535 +5.323	- 14 - 43
185	η Aurigae	3.3			+4.2032		E	/ 59·5° 7 4.01		- 43 - 71
			_		_				_	- 68
186 187	•	3.2	_		+2.5391 +1.5496				+4.970	+ 6
188	β Eridani	5.I 2.7	-		+2.9487				+4.905	- 79
189		4.7	5 4		+1.0229				+4.951	+103
190		4.2			+2.8704				+4.762	- 4
192		· .	1		+4.1021	_			+4.476	- 79
192		5. I 5. I			+9.8257					+ 1 60
193		I			+4.4283					-428
194		1	5 10	21.361	+2.8823	+ 2	- 8 1	5.26	+4.308	0
195		3.7	5 13	22.878	+2.9122	- 12	- 6 5º	6 15.83	+4.042	- 7
196	9 Doradus	4.8			-0.0535		1		+4.050	+ 39
	[o Columbae]								+3.638	-328
	[Columb. 12 G.]	6.0	5 15	55.620	+2.3917	+ 8	-27 2			11
-	[ζ Pictoris]			13.986	+ 1.4691	+ 8	−5 ° 4		+-3.946	227
200	[3.3	5 20	6.143	+3.0161	+ 5	- 2 2	8 35.23	+3.473	+ 1

Nr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigenbew. in Einh. von o*.com	Dekl. 1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
201 202 203 204	γ Orionis β Tauri 17 Camelop. [β Leporis]	1.7 1.8 5.9 2.9	5 20 5 21	47.468 56.933	+3.2170 +3.7912 +5.6586 +2.5707	+ 25 - 3	+62 59 45.16	+3.236 +3.312	- 20 -177 - 1 - 93
206	o Orionis	2.2	5 27	33.666	+3.0642	0	- o 21 46.15	+2.826	_ 2
205 207 208	Gr. 966 α Leporis [φ¹ Orionis]	2 .6	7	53.554	+8.0068 +2.6455 +3.2926	+ 2	+74 59 17.26 $-17 53 2.23$ $+ 9 25 52.99$	+2.715	+ 20 + 2 - 10
209 210	ι Orionis ε Orionis	2.8 1.6	5 31	10.617	+2.9345 +3.0436	+ 4	- 5 57 58.87 - 1 15 24.41	+2.510	- 4 - 3
211	ζ Tauri β Doradus	3.0 3.7	5 3 ² 5 3 ²	26.671 52.106	+3.5848 +0.5170	+ 6 - 13	+21 5 25.14 -62 32 47.65	+2.379 +2.365	26 2
213 214 215	[σ Orionis] [γ Mensae] α Columbae	3.8 5.3 2.4	5 35	19.313	+3.0111 -2.3931 $+2.1717$	+278	— 2 38 58.49 —76 24 12.57 —34 7 12.09	+2.453	- I +299 - 37
216 217	o Aurigae [γ Leporis] [130 Tauri] ζ Leporis z Orionis	5.7 3.8 5.8 3.5 2.1	5 39 5 49 5 42 5 43	9.566 50.196 21.818 0.776	+4.6463 +2.5015 +3.4981 +2.7179 +2.8451	- 6 -201 + 4 - 12	+49 47 21.50 -22 28 34.33 +17 41 50.52 -14 51 13.37 - 9 41 59.46	+1.812 $+1.298$ $+1.535$ $+1.483$	- 9 -376 - 6 - 2 - 3
221 222 223 224	[v Aurigae] [ð Leporis] [ð Columbae] α Orionis	3.9 3.8 2.9	5 45 5 47 5 47 5 5	27.555 34.777 53.495 27.686	+4.1570 $+2.5800$ $+2.1134$ $+3.2478$	+ 166 + 33 + 20	+39 7 26.47 -20 53 9.20 -35 48 1.66 + 7 23 30.03	+1.282 $+0.433$ $+1.462$ $+0.848$	+ II -652 +404 + 13
225 226 227 228 229	 δ Aurigae [η Leporis] β Aurigae η Columbae 	3.8 3.6 1.9 2.7 3.9	5 52 5 53 5 53 5 56	26.529 8.826 47.318 29.016	+1.8366	$ \begin{array}{r} - 27 \\ - 42 \\ + 49 \\ + 22 \end{array} $	+44 56 22.66 +37 12 26.86 -42 49 10.79	+0.800 +0.592 +0.456 +0.274	-122 +140 - 8 - 87 - 34
230 231 232 233		5.9 5.8 4.4 5.6	6 2	58.163 2 36.283 3 5.897	+6.0366	- 83 + 11 - 5	+14 46 46.53 +65 44 13.6	3 +0.060 3 -0.259 7 -0.387	$ \begin{array}{r} -15 \\ +232 \\ -31 \\ -29 \end{array} $
	22 H. Camelop.	4.6	6 9	15.712	+6.6177	+ 16	-54 56 56.3 +69 21 7.58	-0.912	-102
236 237 239 238 240	η Geminor. [2 Lyncis] [2 Mensae] [2 Columbae] [4 Canis mai.	4·4 5.1 4·4	6 13 6 13	56.893 49.755 3 27.396	3 + 5.2969 5 - 1.7889 5 + 2.1340	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	+22 31 58.5 +59 2 37.4 -74 43 25.1 -35 6 39.8 -30 1 26.7	-1.015 -1.347 -1.102	+ 29 -226 + 74

Nr.	Name	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigenbew. in Einb. von o*.0001	Dekl.	1913.0	Jährl. Verände- rung	Jührl. Eigen- bew.in Einh. von o".001
241	μ Geminor.	2.0	6 ^h 17	11 862	+ 3.6309	-1- 48	+22.2	2 22 06	1 657	- III
242	ψ ¹ Aurigae				+ 4.6241					- 3
243	β Canis maj.				+ 2.6417				-1.647	+ 2
244	8 Monocer.		6 19		+ 3.1799	- 7	+ 4 3	8 16.03	-1.670	+ 4
2 45	α Argus	1	6 22		+ 1.3313				-1.911	- - II
246	10 Monocer.	5.0	6 23		+ 2.9629			12 27.65	-2.061	+ 5
247	8 Lyncis				+ 5.4909					
	23 H. Camelop.				+10.3019					623
249					+ 2.5140					+ 13
250					+ 4.1600					- 114
251	γ Geminor.	2.0	6 32	41.102	+ 3.4672	+ 34	+16 2	28 27.70	-2.805	- 45
252	v Argus		6 35		+ 1.8354				-3.078	- 2 0
253	S Monocer.				+ 3.3053					- 5
254	ε Geminor.				+ 3.6934					15
256	ξ Geminor.				+ 3.3686			9 24.63	00.0	- 199
255	[ψ ⁵ Λurigae]	5.5	6 40	28.232	+ 4.3289	+ 6	+43 :	30 53.80	-3.367	+ 154
257	α Canis maj.1)				+ 2.6438					, , ,
258					+ 3.1299					- 20
	[43 Camelop.]				+ 6.4891					+ 3
261	v Geminor.	-	6 47		+ 3.9580					- 55
262	α Pictoris	3.2	6 47		+ 0.6182					
264					- 4.9387					
260	-				+ 8.8004					13
263	[τ Argus]				+ 1.4888			30 38.61		96
265		_			+ 5.2054			32 16.87		- 130
266	3 4				+ 2.7876				4.365	14
267	J				- 0.6770				-4.536	+ 12
268	1	1.5			+ 2.357				-4.781	+ I
269	U				+ 3.5600				-5.102	- 3
270					+ 2.5052				-5.137	0
271		_	1		+ 2.715		1	30 14.81		_ 12
272					+ 1.117				-5.422	
					+ 2.438					
273 274					+ 4.132					
275					+ 1.709					
	[64 Aurigae]				+ 4.178					
277 278		2.0	7 13	3.05°	+ 3.450 $+ 2.118$	4 — 31 4 — T4	-26	56 26 74	-6.349	- 44 + 3
279		2.0	7 14	55 720	5 + 3.586	1 14 5 - II	1-22	8 26 20	-6.448	— IC
28 0					+4.9086					

295 β Geminor. 1.1 7 39 59.667 +3.6762 -468 +28 14 13.78 -8.525 -53 296 π Geminor. 297 ζ Volantis 3.9 7 42 53.717 -0.7213 + 8 -72 23 50.18 -8.693 + 8 298 [Pupp. 205 G.] 5.7 7 47 44.606 +2.7788 -41 -13 39 59.69 -9.423 -343 301 [a Puppis] 3.7 7 49 13.549 +2.0619 -18 -40 21 3.24 -9.195 + 1 302 [53 Gamelop.] 3.5 7 54 34.047 +1.5271 -30 -40 21 3.24 -9.195 + 1 304 [27 Monocer.] 3.5 7 54 34.047 +1.5271 -32 -52 44 54.59 -9.585 + 24 305 χ Argus 306 ζ Argus 307 χ Argus 308 χ Navis 308 χ Navis 309 χ Argus 309 χ Argus 300 χ Argus 300 χ Argus 301 χ Argus 302 [27 Monocer.] 303 χ Argus 304 [27 Monocer.] 305 χ Geminor. 306 χ Argus 307 χ Argus 308 χ Navis 309 χ Argus 309 χ Argus 300 χ Argus 300 χ Argus 301 χ Argus 302 [28 8 3 50.313 +2.5547 -64 4.6 8 1 55.158 +4.5280 -59 4.6 8 1 55.158 +4.5280 -59 4.6 8 1 55.158 +4.5280 -59 4.6 8 1 55.158 +4.5280 -59 4.6 8 1 47.911 +3.2564 -30 4.7 4 47.21 -10.542 -4 4.7 4 47.	Nr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o ⁸ .cooi	Dekl. 191	Jährl. 3.0 Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
282 t Geminor. 3.8 7 20 19.521 +3.7308 -83 +27 58 18.74 -6.668 -85 284 Gr. 1308 5.8 7 21 50.277 +6.2743 -7 +68 38 41.15 -7.056 -41 286 β Ganismin. 2.9 7 22 20.020 +3.2556 -31 +8 27 55.41 -7.056 -41 287 α Geminor. 1.8,2.8 7 29 2.944 +3.8350 -129 +32 4 49.80 -7.676 -81 288 (Pupp. 108 G.] 4.7 7 30 19.713 +2.5674 -39 -22 6 27.97 -7.686 +18 289 25 Monocer. 5.3 7 32 57.186 +2.2192 -27 -34 46 20.25 -7.989 +16 291 α Can.min.*) 0.5 7 34 44.911 +3.1424 -469 +5 56 55.47 -9.082 -1029 292 24 Lyncis 5.0 7 35 39.171 +5.0943 -47 +58 54 54.12 -8.179 -53 293 26 Monocer. 3.4 7 39 11.852 +3.6667 -15 +24 36 26.84 -8.462 -54 295 β Geminor. 3.4 7 39 13.852 +3.6267 -15 +24 36 26.84 -8.462 -54 296 Γ Geminor. 5.5 7 41 54.003 +3.8750 -1 +33 37 48.25 -8.653 -31 297 ζ Volantis 3.9 7 42 53.717 -0.7213 +8 -7.22 -7.288 -8.663 +8 298 [Pupp. 205 G.] 5.7 7 47 44.666 +2.7788 -41 -13 -47 -7.2471 -30 -47 47 -7.2471 -30 -47 47 -7.2471 -30 -47 47 -7.2471 -30 -47 47 -7.2471 -30 -47 -7.2478 -9.137 -7.2478	28т	à Valantie	4.0	h 16	n s	-0.0180		-67° 47' 5	2.86 - 6.611	12
284 [f. Can. maj.]			,					-27 58 I	8.74 - 6.068	
284 Gr. 1308 285 β Canismin. 286 ρ Geninor. 287 α Gemin.² 18,2.8 γ 29 2.944 +3.8350 -129 +32 4 49.80 -7.676 -81 288 [Pupp. 108 G.] 289 [γ Puppis] 291 α Can.min.³) 292 24 Lyneis 293 [26 Monocer.] 292 [γ Puppis] 4.7 γ 34 8.920 +2.2192 -27 27 -34 46 20.25 -7.989 + 16 293 [26 Monocer.] 294 μ Creminor. 314 γ 7 39 11.852 +3.6367 -15 +24 36 26.84 -8.462 -54 295 β Geminor. 314 γ 7 39 59.667 +3.6762 -468 296 π Geminor. 297 ζ Volantis 298 [Pupp. 205 G.] 5.7 γ 44 44.606 +2.7788 -41 -3 3 37 48.25 -8.663 -3 31 298 [Pupp. 205 G.] 5.7 γ 47 44.606 +2.7788 -41 -3 3 39 59.669 -9.423 -3 343 299 [26 Lyneis] 300 [α Γ. 1374] 301 [α Puppis] 302 [α R. 1374] 303 [α R. 1374] 304 [α R. 1374] 305 [α R. 1374] 306 Gr. 1374 307 γ Argus 307 γ Argus 308 γ Argus 309 γ Argus 309 γ Argus 301 [α Puppis] 300 Gr. 1374 301 [α Puppis] 301 β R. 1147 302 [α Argus 303 γ Argus 304 [α Y Argus 305 γ Argus 306 γ Argus 307 γ Argus 307 γ Argus 308 γ Argus 309 γ Argus 309 γ Argus 300 Gr. 1374 301 [α Puppis] 302 Γ Argus 303 γ Argus 303 γ Argus 304 (α Y Argus 305 γ Argus 306 γ Argus 307 γ Argus 307 γ Argus 308 γ Argus 309 γ Argus 309 γ Argus 300 Gr. 1374 311 20 Navis 310 Br. 1147 58 8 8 38.41.75 - 7.051 - 44 5.2 γ Argus 310 β Canecin 313 [γ Puppis] 310 β Canecin 313 [γ Puppis] 311 β Canecin 313 [γ Puppis] 312 β Canecin 313 [γ Puppis] 314 β Canecin 315 β Canecin 315 β Canecin 316 Br. 1197 317 δ Ursae mai, 317 δ Ursae mai, 318 β Chamael. 319 [β Volantis] 317 δ Volantis 319 [β Chamael. 319 [β Chamael. 319 [β Chamael. 319 [β Chamael. 319 [β Volantis] 317 δ Volantis 318 β Chamael. 319 [β Volantis] 319 [β Volantis] 317 δ Volantis 317 δ Volantis 318 β Chamael. 319 [β Volantis] 319 (β Chamael. 310 (β Chamael. 311 β Volantis] 317 δ Volantis 318 β Chamael. 319 [β Volantis] 319 (β Chamael. 310 (β Chamael. 311 γ Volantis) 311 γ Volantis									, .	_
285 β Canismin. 2.9 7 22 26.020 +3.2556 — 31 + 8 27 55.11 — 7.096 — 41 286 ρ Geminor. 4.4 7 23 31.065 +3.8637 +122 +31 57 30.46 — 6.962 + 183 288 (Pupp. 108 G.] 4.7 7 30 19.713 +2.5674 — 39 — 22 6 27.07 — 7.680 + 18 289 25 Monocer. 5.3 7 32 57.186 +2.0838 — 47 — 3 54 57.79 — 7.889 + 20 22 24 Lyncis 5.0 7 35 30.171 +5.0043 — 47 — 3 54 57.79 — 7.889 + 16 292 24 Lyncis 5.0 7 35 30.171 +5.0043 — 47 + 58 54 54.12 — 8.179 — 53 293 [26 Monocer.] 4.0 7 37 5.428 +2.8663 — 57 — 9 20 51.15 — 8.262 — 21 294 x Geminor. 5.0 7 35 30.171 +5.0043 — 47 + 58 54 54.12 — 8.179 — 53 295 [26 Monocer.] 4.0 7 37 5.428 +2.8663 — 57 — 9 20 51.15 — 8.262 — 21 294 x Geminor. 5.5 7 41 54.003 +3.8750 — 1 + 33 37 48.25 — 8.525 — 53 20 [26 Lyncis] 3.0 7 42 53.717 — 0.7213 + 8 — 72 23 50.18 — 8.663 — 31 [2 Puppis] 3.7 7 49 13.549 +2.6619 — 18 — 47 47 47 27.87 — 9.137 — 7 30 [26 Lyncis] 3.0 [2 Puppis] 3.7 7 49 44.666 +2.7788 — 41 — 13 39 59.60 — 9.423 — 343 20 [25 G.] 209 [26 Lyncis] 3.7 7 49 13.549 +2.6619 — 18 — 47 47 47 27.87 — 9.137 — 7 30 4 4.047 +1.5271 — 30 4.04 21 3.24 — 9.195 + 1 30 2 [25 G.] 209 [26 Lyncis] 3.7 7 49 48.224 +7.2471 — 30 4.4 47 47 27.87 — 9.137 — 7 30 4.127 Monocer.] 5.2 7 55 23.446 +2.9995 — 27 3 26 30.00 — 9.663 + 9.304 [27 Monocer.] 5.2 7 55 23.446 +2.9995 — 27 3 26 30.00 — 9.663 + 9.304 [27 Monocer.] 5.2 7 55 23.446 +2.9995 — 27 3 26 30.00 — 9.663 + 9.304 [27 Monocer.] 5.8 8 8 38.497 +7.6241 + 58 7 1 26.58 — 10.654 + 17 31 20 Navis 310 Br. 1147 5.8 8 8 38.497 +7.6241 + 58 7 1 26.58 — 10.654 + 17 31 20 Navis 31 Jyncis 4.6 8 15 51.7846 +2.2440 — 104 47 4 47.21 — 10.524 — 48 13 1.9ncis 4.4 8 16 53.067 +4.1193 — 8 43 28 4.78 — 11.381 — 10.524 — 47 4 47.1 — 10.524 — 48 13 1.9ncis 4.4 8 16 53.067 +4.1193 — 8 43 28 4.78 — 11.381 — 10.525 — 32 1.40 — 10.727 — 6.318 [3 Puppis] 31 Jyncis 4.4 8 16 53.067 +4.1193 — 8 43 28 4.78 — 11.381 — 10.525 — 12.318 [3 Puppis] 31 Jyncis 4.4 8 16 53.067 +4.1193 — 8 43 28 4.78 — 11.381 — 10.525 — 12.318 [3 Puppis] 31 [3 Pu									, ,	_
286			_			, , ,				
287 α Gemin.?) 288 (Pupp. 108 G.) 289 (25 Monocer. 5.3) 290 (γ Puppis) 291 α Can.min.³) 292 (24 Lyncis 5.0) 293 (26 Monocer. 1) 294 α Geminor. 295 β Geminor. 295 β Geminor. 296 α Geminor. 297 α Volantis 6.5 γ 41 54.003 γ 3.8750 γ 42 53.717 γ 0.7213 γ 8 8 72 23 50.18 8 8.693 γ 8 8.298 (Pupp. 205 G.) 298 (Pupp. 205 G.) 299 (26 Lyncis) 299 (26 Lyncis) 309 (26 Lyncis) 300 (37 γ 44.606 γ 2.7788 γ 41 1.33 37 γ 48.25 γ 8.663 γ 7 47 γ 44.606 γ 2.7788 γ 41 1.378 8 8.525 γ 53 30.10 (2 Puppis) 300 (37 γ 49 48.224 γ 7.2471 γ 30 γ 4.578 γ 9.137 γ 7 54 34.047 γ 1.5271 γ 32 7.524 γ 4.54.59 γ 9.669 γ 2.13 30 γ Δrgus 304 (27 Monocer.) 305 γ Δrgus 306 α Λrgus 307 γ Δrgus 307 γ Δrgus 308 γ Δrgus 309 γ Δrgus 300 βr. 1147 γ 5.8 8 8 8 38.497 γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ	286	a Geminor.	1.4				-	+21 57 2	0.46 - 6.062	18a
288 [Pupp. 108 G.] 289 25 Monocer. 290 [/ Puppis] 4.7 7 30 19.713 +2.5674 -3 39 -22 6 27.97 -7.680 + 18 290 [/ Puppis] 4.7 7 34 8.920 +2.2192 -27 -34 46 20.25 -7.989 + 16 291 α Can.min.*) 0.5 7 34 44.911 +3.1424 -469 + 5 26 55.47 -9.082 -1029 292 24 Lyncis 5.0 7 35 39.171 +5.9943 -47 +58 54 54.12 -8.179 -53 293 26 Monocer.] 4.0 7 7 7 7 7 7 7 7 7										_
289 25 Monocer. 5.3 7 32 57.186 +2.9838 -47 -3 54 57.79 -7.889 +20 290 [/ Puppis] 4.7 7 34 8.920 +2.2192 -27 -34 46 20.25 -7.989 +16 291 α Can.min.³) 0.5 7 34 44.911 +3.1424 -469 +5 26 55.47 -9.082 -1029 292 24 Lyncis 5.0 7 35 39.171 +5.0043 -47 +58 54 54.12 -8.179 -53 294 α Geminor. 3.4 7 39 11.852 +3.6267 -15 +24 36 26.84 -8.462 -54 295 β Geminor. 5.5 7 41 54.003 +3.8750 -1 +33 37 48.25 -8.653 -3 296 α Geminor. 5.5 7 41 54.003 +3.8750 -1 +33 37 48.25 -8.653 -3 297 ζ Volantis 3.9 7 42 53.717 -0.7213 +8 -7.2 23 50.18 -8.663 +8 298 [Pupp. 205 G.] 5.7 7 47 44.606 +2.7788 -41 -13 39 59.69 -9.423 -343 299 [26 Lyncis] 3.7 7 49 13.549 +2.0619 -18 -47 47 27.87 -9.137 -7 202 [33 Camelop.] 3.7 7 49 48.224 +7.2471 -30 +47 47 27.87 -9.137 -7 203 χ Argus 3.5 7 54 34.047 +1.5271 -32 -52 44 54.59 -9.585 +24 204 α α α α α α α α α	- '-	,								
290 [/ Puppis]			1	, ,						
292 24 Lyneis 293 [26 Monocer.] 4.0 7 35 39.171 +5.0943 - 47 +58 54 54.12 - 8.179 - 53 293 [26 Monocer.] 4.0 7 37 5.428 +2.8663 - 57 - 9 20 51.15 - 8.262 - 21 32 295	290	[/Puppis]	4.7							+ 16
292 24 Lyneis 293 [26 Monocer.] 4.0 7 35 39.171 +5.0943 - 47 +58 54 54.12 - 8.179 - 53 293 [26 Monocer.] 4.0 7 37 5.428 +2.8663 - 57 - 9 20 51.15 - 8.262 - 21 32 295	291	2 Can. min.3)	0.5	7 34	44.911	+3.1424	-469	+ 5 26 5	5.47 - 9.082	-1029
293 [26 Monocer.] 294 α Geminor. 3.4 γ 39 11.852 $+3.6267 - 15$ $+24 36 26.84 - 8.462 - 54$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+24 36 26.84 - 8.462 - 54$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+28 14 13.78 - 8.525 - 53$ $+28 6631 - 15$ $+28 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 13.78 - 8.525 - 53$ $+8 14 14 14 14 14 14 14 14 14 14 14 14 14 $			_							_
295 β Geminor. 1.1 7 39 59.667 +3.6762 -468 +28 14 13.78 -8.525 -53 296 π Geminor. 297 ζ Volantis 3.9 7 42 53.717 -0.7213 + 8 -72 23 50.18 -8.693 + 8 298 [Pupp. 205 G.] 5.7 7 47 44.606 +2.7788 -41 -13 39 59.69 -9.423 -343 299 [26 Lyncis] 3.7 7 49 13.549 +2.0619 -18 -40 21 3.24 -9.195 + 1 300 Gr. 1374 5.5 7 49 48.224 +7.2471 -30 +60 33 48.07 -9.609 -21 303 χ Argus 3.5 7 54 34.047 +1.5271 -32 -52 44 54.59 -9.585 -24 304 27 Lyncis 305 χ Argus 307 27 Lyncis 46 8 155.158 +4.5280 -59 +51 45 30.9 χ Argus 30.8 χ Navis 20.8 8 3 5.3 8 3 5.5 7 58 8 8 38.497 -7.6241 +8 -72 23 50.18 -8.693 +8 -72 23 50.18 -8.693 +8 -72 23 50.18 -72 24 72 74 74 74 74 74	293	[26 Monocer.]	-	7 37						
296 π Geminor.	294	z Geminor.	3.4							- 54
297 ζ Volantis 298 [Pupp. 205 G.] 5.7 7 47 44.606 42.7788 - 41 -13 39 59.69 - 9.423 - 343 - 343 - 39 7 48 22.919 +4.3802 - 40 +47 47 27.87 - 9.137 - 7 - 7 - 7 - 7 - 49 13.549 +2.0619 - 18 - 40 21 3.24 - 9.195 + 1 - 13 39 59.69 - 9.423 - 343 - 343 - 343 - 344 - 345 - 40 - 41 - 47	2 95	β Geminor.	I.I	7 39	59.667	+3.6762	-468	+28 14 1	3.78 - 8.525	— 53
297 ζ Volantis 298 [Pupp. 205 G.] 5.7 7 47 44.606 42.7788 - 41 -13 39 59.69 - 9.423 - 343 - 343 - 39 7 48 22.919 +4.3802 - 40 +47 47 27.87 - 9.137 - 7 - 7 - 7 - 7 - 49 13.549 +2.0619 - 18 - 40 21 3.24 - 9.195 + 1 - 13 39 59.69 - 9.423 - 343 - 343 - 343 - 344 - 345 - 40 - 41 - 47	296	π Geminor.	5.5	7 41	54.003	+3.8750	_ I	+33 37 4	8.25 - 8.653	_ 31
299 [26 Lyneis] 301 [α Puppis] 302 [Gr. 1374] 302 [53 Gamelop.] 303	297	ζ Volantis	3.9	7 42	53.717	-0.7213	+ 8			+ 8
301 [α Puppis] 3.7 7 49 13.549 +2.0619 — 18 —40 21 3.24 — 9.195 + 1 1 300 Gr. 1374 5.5 7 49 48.224 +7.2471 — 30 +74 9 6.75 — 9.273 — 32 32 [53 Gamelop.] 6.3 7 54 17.179 +5.1493 — 30 +60 33 48.07 — 9.609 — 21 303 γ Argus 3.5 7 54 34.047 +1.5271 — 32 —52 44 54.59 — 9.585 + 24 304 [27 Monocer.] 5.2 7 55 23.446 +2.9995 — 27 —3 26 30.00 — 9.663 + 9 305 γ Geminor. 5.1 7 58 10.654 +3.6903 — 15 +28 2 20.60 — 9.930 — 46 307 27 Lyncis 4.6 8 1 55.158 +4.5280 — 59 +51 45 30.27 —10.172 — 5 308 ε Navis 2.8 8 3 50.313 +2.5547 — 64 —24 3 10.65 —10.266 + 47 309 γ Argus 2.1 8 6 51.050 +1.8488 — 12 —47 4 47.21 —10.542 — 4 310 Br. 1147 5.8 8 8 38.497 +7.6241 + 58 +76 1 26.58 —10.654 + 17 311 20 Navis 5.3 8 9 20.058 +2.7581 — 8 —15 31 31.91 —10.727 — 60 313 [η Puppis] 4.4 8 16 53.067 +4.1193 — 8 +43 28 4.78 —11.381 — 108 315 ε Argus 1.7 8 20 43.810 +1.2350 — 32 —59 13 44.95 —11.535 + 15 31 31.91 316 Br. 1197 3.6 8 21 18.850 +2.9995 — 41 —3 37 10.10 —11.613 — 21 318 β Chamael. 3.3 8 23 2.802 +5.0123 —174 4 47.05 —11.701 + 30 318 β Chamael. 3.7 8 24 47.638 +0.6624 — 53 —65 50 47.05 —12.016 —177			5.7	7 47	44.606	+2.7788	41	-13 39 5	9.69 - 9.423	343
300 Gr. 1374 5.5 7 49 48.224 +7.2471 — 30 +74 9 6.75 — 9.273 — 32 (53 Camelop.) 6.3 7 54 17.179 +5.1493 — 30 +60 33 48.07 — 9.609 — 21 303 γ Argus 3.5 7 54 34.047 +1.5271 — 32 — 52 44 54.59 — 9.585 + 24 304 [27 Monocer.] 5.2 7 55 23.446 +2.9995 — 27 — 3 26 30.00 — 9.663 + 9 305 γ Geminor. 5.1 7 58 10.654 +3.6903 — 15 +28 2 20.60 — 9.930 — 46 307 27 Lyncis 4.6 8 1 55.158 +4.5280 — 59 +51 45 30.27 — 10.172 — 5 308 ε Navis 2.8 8 3 50.313 +2.5547 — 64 24 3 10.65 — 10.266 + 47 309 γ Argus 2.1 8 6 51.050 +1.8488 — 12 — 47 4 47.21 — 10.542 — 48 310 Br. 1147 5.8 8 8 38.497 +7.6241 + 58 +76 1 26.58 — 10.654 + 17 311 20 Navis 5.3 8 9 20.058 +2.7581 — 8 — 15 31 31.91 — 10.727 — 60 314 31 Lyncis 315 ε Argus 1.7 8 20 43.810 +1.2350 — 32 13 44.95 — 11.381 — 108 315 ε Argus 1.7 8 20 43.810 +1.2350 — 32 13 44.95 — 11.535 + 15 31 31.91 — 10.712 — 21 318 9 Chamael. 3.3 8 23 2.802 +5.0123 — 174 44 — 456 — 77 12 14.91 — 11.701 + 30 319 [3 Volantis] 3.7 8 24 47.638 +0.6624 — 53 — 65 50 47.05 — 12.016 — 177			5.7						7.87 - 9.137	7 7
302 [53 Camelop.] 303 γ Argus 305 γ 54 17.179 +5.1493 30 +60 33 48.07 -9.609 - 21 304 [27 Monocer.] 502 γ 55 23.446 +2.9995 - 27 - 3 26 30.00 -9.663 + 9 305 γ Geminor. 503 γ Argus 305 γ Geminor. 504 γ 58 10.654 +3.6903 - 15 +28 2 20.60 -9.930 - 46 306 ζ Argus 307 27 Lyncis 308 ι Navis 208 8 3 50.313 +2.5547 - 64 309 γ Argus 310 Br. 1147 508 8 8 38.497 +7.6241 + 58 311 20 Navis 312 β Caneri 313 [γ Puppis] 314 31 Lyncis 315 ε Argus 1.7 8 20.43.810 +2.2440 -104 316 Br. 1197 317 ι Ursae maj. 317 ι Ursae maj. 318 β Chamael. 319 [β Volantis] 319 (β Volantis) 317 (β Volantis) 318 β Chamael. 319 [β Volantis] 319 (β Volantis) 317 γ 47.63 + 4.6624 - 53 -65 50 47.05 -12.016 - 177	301	[a Puppis]	3.7	7 49	13.549	+2.0619)— 18	-40 2I	3.24 - 9.195	+ I
303 γ Argus 304 [27 Monocer.] 305 γ Geminor. 5.1 7 58 10.654 +2.9995 - 27 - 3 26 30.00 - 9.663 + 9. 306 ζ Argus 307 27 Lyncis 308 ι Navis 2.8 8 3 50.313 +2.5547 - 64 - 24 3 10.65 - 10.266 + 47. 310 Br. 1147 5.8 8 8 38.497 +7.6241 + 58 - 15 31 31.91 - 10.727 - 6. 312 β Caneri 313 [γ Puppis] 314 31 Lyncis 315 β Caneri 315 β Caneri 316 Br. 1197 317 ι Ursae maj. 318 β Chamael. 319 [β Volantis] 318 β Chamael. 319 [β Volantis] 319 [β Volantis] 317 γ Volantis] 318 β Chamael. 319 [β Volantis] 319 [β Volantis] 317 γ Volantis] 318 β Chamael. 319 [β Volantis] 319 [β Volantis] 317 γ Volantis] 318 β Chamael. 319 [β Volantis] 319 [β Volantis] 319 [β Volantis] 310 β Chamael. 311 γ Subartis γ Subart	300	Gr. 1374	5.5	7 49	48.224	+7.2471	_ 30	+74 9	6.75 - 9.273	32
304 [27 Monocer.] 305 γ Geminor. 5.1 7 58 10.654 +3.6903 - 15 +28 2 20.60 - 9.930 - 46 306 ζ Argus 307 27 Lyncis 308 ι Navis 2.8 8 3 50.313 +2.5547 - 64 309 γ Argus 310 Br. 1147 5.8 8 8 38.497 +7.6241 + 58 311 20 Navis 312 β Caneri 3.5 8 11 47.911 +3.2564 - 30 314 1 Lyncis 315 ε Argus 316 Br. 1197 317 ι Ursae maj. 318 β Chamael. 319 [β Volantis] 319 (β Volantis) 310 (β Volantis) 311 (β Volantis) 312 (β Chamael. 313 (β Volantis) 314 (β Volantis) 315 (β Volantis) 316 (β Volantis) 317 (β Volantis) 318 (β Chamael. 319 (β Volantis) 319 (β Volantis) 317 (β Volantis) 318 (β Chamael. 319 (β Volantis) 319 (β Volantis) 319 (β Volantis) 310 (γ Volantis) 311 (γ Volantis) 312 (γ Volantis) 313 (γ Volantis) 314 (γ Volantis) 315 (γ Volantis) 316 (γ Volantis) 317 (γ Volantis) 318 (γ Volantis) 319 (β Volantis) 319 (β Volantis) 310 (γ Volantis) 311 (γ Volantis) 312 (γ Volantis) 313 (γ Volantis) 314 (γ Volantis) 315 (γ Volantis) 316 (γ Volantis) 317 (γ Volantis) 318 (γ Volantis) 319 (β Volantis) 319 (β Volantis) 310 (γ Volantis) 311 (γ Volantis) 311 (γ Volantis) 312 (γ Volantis) 313 (γ Volantis) 314 (γ Volantis) 315 (γ Volantis) 316 (γ Volantis) 317 (γ Volantis) 318 (γ Volantis) 319 (γ Volantis) 319 (γ Volantis) 310 (γ Volantis) 311 (γ Volantis) 311 (γ Volantis) 312 (γ Volantis) 313 (γ Volantis) 314 (γ Volantis) 315 (γ Volantis) 316 (γ Volantis) 317 (γ Volantis) 318 (γ Volantis) 319 (γ Volantis) 319 (γ Volantis) 310 (γ Volantis) 310 (γ Volantis) 311 (γ Volantis) 311 (γ Volantis) 312 (γ Volantis) 313 (γ Volantis) 314 (γ Volantis) 315 (γ Volantis) 317 (γ Volantis) 318 (γ Volantis) 319 (γ Volantis) 319 (γ Volantis) 310 (γ Volantis)	302		6.3	7 54	17.179	+5.1493			8.07 - 9.609	21
305					_	_				
306	-	1	_	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						-
307 27 Lyncis 4.6 8 1 55.158 +4.5280 - 59 +51 45 30.27 -10.172 - 55 30.8 (Navis 2.8 8 3 50.313 +2.5547 - 64 -24 3 10.65 -10.266 + 47 30.9 γ Argus 2.1 8 6 51.050 +1.8488 - 12 -47 4 47.21 -10.542 - 48 31.0 5.8 8 8 38.497 +7.6241 + 58 +76 1 26.58 -10.654 + 17 311 20 Navis 3.5 8 11 47.911 +3.2564 - 30 +9 27 15.64 -10.955 - 52 313 Lyncis 314 31 Lyncis 4.4 8 16 53.067 +4.1193 - 8 +43 28 4.78 -11.381 - 10.8 315 ε Argus 1.7 8 20 43.810 +1.2350 - 32 -59 13 44.95 -11.535 + 15 318 β Chamael. 3.8 23 2.802 +5.0123 -174 461 0 36.03 -11.826 - 111 318 β Chamael. 3.7 8 24 47.638 +0.6624 - 53 -65 50 47.05 -12.016 - 177	305	y Gemmor.	5.1	7 58	10.654	+3.6903	15	+28 2 2	.o.60 — 9.930	46
308 t Navis 2.8 8 3 50.313 +2.5547 - 64 -24 3 10.65 -10.266 + 47 2.1 8 6 51.050 +1.8488 - 12 -47 4 47.21 -10.542 - 47 2.1 8 6 51.050 +7.6241 + 58 +76 1 26.58 -10.654 + 17 2.1 2.0 Navis 3.5 8 9 20.058 +2.7581 - 8 -15 31 31.91 -10.727 - 68 2.1 8 14 47.911 +3.2564 - 30 +9 27 15.64 -10.955 - 52 2.1 14 11.070 + 89 2.1 13.1 Lyncis 4.4 8 16 53.067 +4.1193 - 8 +43 28 4.78 -11.381 - 10.8 2.1 1.381 - 10	306		1							
309 γ Argus 2.1 8 6 51.050 +1.8488 - 12 -47 4 47.21 -10.542 - 4 310 Br. 1147 5.8 8 8 38.497 +7.6241 + 58 +76 1 26.58 -10.654 + 17 311 20 Navis 3.5 8 9 20.058 +2.7581 - 8 -15 31 31.91 -10.727 - 6 312 β Caneri 3.5 8 11 47.911 +3.2564 - 30 + 9 27 15.64 -10.955 - 52 313 31 Lyneis 4.4 8 16 53.067 +4.1193 - 8 +43 28 4.78 -11.381 - 108 315 ϵ Argus 1.7 8 20 43.810 +1.2350 - 32 -59 13 44.95 -11.535 + 15 316 Br. 1197 3.6 8 21 18.850 +2.9995 - 41 - 3 37 19.10 -11.613 - 21 318 θ Chamael. 3.3 8 23 2.802 +5.0123 -174 +61 0 36.03 -11.826 - 111 319 β Volantis] 3.7 8 24 47.638 +0.6624 - 53 -65 50 47.05 -12.016 - 177		, ,		1		-				. 1
310 Br. 1147 5.8 8 8 38.497 +7.6241 + 58 +76 1 26.58 -10.654 + 17 311 20 Navis 312 β Caneri 313 [q Puppis] 314 31 Lyneis 315 ε Argus 1.7 8 20 43.810 +1.2350 - 32 -59 13 44.95 -11.535 + 15 316 Br. 1197 317 δ Ursae maj. 318 β Chamael. 319 [β Volantis] 317 8 24 47.638 +0.6624 - 53 -65 50 47.05 -12.016 - 177	_		1	_					-	1
311 20 Navis 312 β Caneri 3.5 8 9 20.058 $+2.7581$ -8 -15 31 31.91 -10.727 -6 63 13 312 13 312 13 313 13 313 13 313 13 313 13 313 13 313 13 313 13 314 13 31 Lyneis 314 31 Lyneis 315 ϵ Argus 1.7 10 8 20 43.810 $+1.2350$ -32 21.14 -11.070 $+89$ 316 10 317 10 318 10 319 10 318 10 319 10 319 10 310 10 311 10 311 10 312 10 313 10 314 10 315 10 316 10 317 10 318 10 319 10 319 10 310 10 311 10 311 10 312 10 313 10 313 10 314 10 315 10 315 10 316 10 317 10 318 10 319										
312 β Cancri 3.5 8 11 47.911 $+3.2564$ -30 $+9$ 27 15.64 -10.955 -52 313 $[\eta$ Puppis] 4.4 8 15 17.846 $+2.2440$ -104 -36 23 21.14 -11.070 $+89$ 31 Lyncis 4.4 8 16 53.067 $+4.1193$ -8 $+43$ 28 4.78 -11.381 -108 316 Br. 1197 3.6 8 20 43.810 $+1.2350$ -32 -59 13 44.95 -11.535 $+15$ 317 \circ Ursae maj. 3.3 8 23 2.802 $+5.0123$ -174 $+61$ 0 36.03 -11.826 -111 318 9 Chamael. 4.2 8 23 16.075 -1.7444 -456 -77 12 14.91 -11.701 $+39$ 319 $[3$ Volantis] 3.7 8 24 47.638 $+0.6624$ -53 -65 50 47.05 -12.016 -177	310		5.0			, ,	-		10.58 - 10.052	1 - 1/
313 [q Puppis] 4.4 8 15 17.846 +2.2440 -104 -36 23 21.14 -11.070 + 89 314 31 Lyncis 4.4 8 16 53.067 +4.1193 - 8 +43 28 4.78 -11.381 - 108 315 \$\(\alpha\) Argus 1.7 8 20 43.810 +1.2350 - 32 -59 13 44.95 -11.535 + 15 316 Br. 1197 3.6 8 21 18.850 +2.9995 - 41 - 3 37 19.10 -11.613 - 21 317 \$\(\alpha\) Ursae maj. 3.3 8 23 2.802 +5.0123 -174 +61 0 36.03 -11.826 -111 318 \$\(\beta\) Chamael. 4.2 8 23 16.075 -1.7444 -456 -77 12 14.91 -11.701 + 30 319 [3 Volantis] 3.7 8 24 47.638 +0.6624 - 53 -65 50 47.05 -12.016 - 177	_			1		1 2		1 2 2		
314 31 Lyncis 315 & Argus 1.7 8 20 43.810 +1.2350 - 32 -59 13 44.95 -11.381 - 108 316 Br. 1197 3.6 8 21 18.850 +2.9995 - 41 - 3 37 19.10 -11.613 - 21 318 9 Chamael. 319 [3 Volantis] 3.7 8 24 47.638 +0.6624 - 53 -65 50 47.05 -12.016 - 177	_		3.5							
315 & Argus 1.7 8 20 43.810 +1.2350 - 32 -59 13 44.95 -11.535 + 15 316 Br. 1197 3.6 8 21 18.850 +2.9995 - 41 - 3 37 19.10 -11.613 - 21 317 & Ursae maj. 3.3 8 23 2.802 +5.0123 -174 +61 0 36.03 -11.826 - 111 318 9 Chamael. 4.2 8 23 16.075 -1.7444 -456 -77 12 14.91 -11.701 + 30 319 [3 Volantis] 3.7 8 24 47.638 +0.6624 - 53 -65 50 47.05 -12.016 - 177				8 15	17.846	+2.2440	104	-36 23 2	21.14 - 11.070	+ 89
316 Br. 1197 3.6 8 21 18.850 +2.9995 - 41 - 3 37 19.10 -11.613 - 21 317 o Ursae maj. 318 3 Chamael. 319 [3 Volantis] 3.7 8 24 47.638 +0.6624 - 53 -65 50 47.05 -12.016 - 177										
317 6 Ursae maj. 3.3 8 23 2.802 +5.0123 -174 +61 0 36.03 -11.826 - 111 318 9 Chamael. 4.2 8 23 16.075 -1.7444 -456 -77 12 14.91 -11.701 + 30 319 [3 Volantis] 3.7 8 24 47.638 +0.6624 - 53 -65 50 47.05 -12.016 - 177				1)			
318 % Chamael. 4.2 8 23 16.075 —1.7444 —456 —77 12 14.91 —11.701 + 30 319 [3 Volantis] 3.7 8 24 47.638 +0.6624 — 53 —65 50 47.05 —12.016 — 177										
319 [3 Voluntis] 3.7 8 24 47.638 +0.6624 - 53 -65 50 47.05 - 12.016 - 177										
			6.3	8 2	7 75 80		53	1 28 18 2	7.05 - 12.010	177

Nr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Eig bev Eig	hrl. gen- v. in nh. on	Dekl	. 19)13.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".oor
321 322	η Cancri [Gr. 1446]	5.6 6.4			+3.4745 +6.7500		2 6 3 6	+20°+73			—12.092 —12.312	
323 324	[Gr. 1460] [e Velorum]	6.3 4.2		_	+4.4631 +2.1078	_	38	+53 -42	1 41		-12.435 -12.526	- 35 - 7
325	[6 Hydrae]	5.4			+2.8422		64	I2			-12.611	- 3
326 327	δ Caneri α Pyxidis	3·9 3·7	8 39 8 40		+3.4141 +2.4098	_					13.104 12.880	
32 8	ı Cancri	4.1	8 41	26.153	+3.6377		12	+29	4	43.75	-13.028	- 47
329 330	[ɛ Hydrae] o Argus	3·3 2.0			+3.1800 +1.6575	+	126 22				-13.080 -13.132	
331	[η Chamael.]	5.9			-1.9604						-13.138	
332	[γ Pyxidis] [σ² Can c ri med.]	4.2 5.6			+2.5458 +3.6681	+					-13.244 -13.500	
334	ζ Hydrae	3.1	l -	-	+3.1742	_	64	+ 6	16	38.10	—13.582	+ 12
336	c Carinae	4.0	8 53	4.622	+1.3631	-					-13.688	
335 337	t Ursae maj. α Can c ri	2.9 4.1	8 53	43.854	+4.1235 +3.2849			⊣ -12	11	42.40	—13.999 —13.817	— 35
338 339	[ρ Ursae maj.] 10 Ursae maj.	4.9 3.9			+5.4576 +3.9074	_	34 383	+67 +42			13.830 14.126	
340	[Gr. 1501]	5.9			+4.4164		8				-14.025	
341	α Ursae maj. α Volantis	3.3	1 -		+4.1115	-	27	+47 -66			-14.096 -14.354	
343 342	[c Velorum]	3.9	9 1		+0.9546 +2.0661		70	-46			- 14.274	
344	σ² Ursae maj.	4.9	1.	45.277	+5.3235	_	16	+67	29	19.27	14.411	- 67
345	λ Argus	2.1	ľ	.,	+2.2042	_	33	43			-14.459	
340 347	[36 Lyncis] & Hydrae	5·3 3·9	9 8		+3.9375 +3.1238	-	18 89				-14.710 -15.083	
348	β Argus	1.7			+0.6713		303	69	21	31.34	-14.815	+ 97
	[38 Lyncis] 83 Cancri	3.9 6.7	9 13		+3.7441 +3.3534		- 8o	$+37 \\ +18$		16.93 29.06	-15.110 -15.156	
351	[t Argus]	2.2	1		+1.6061		35				—r5.056	
352		3.2			+3.6640						-15.103	
353					+1.8563						-15.322	
354 355		3.5			+2.9490 +4.7658						—15.509 —15.588	
356		4.7			+2.4740						—15.683	
357	d Ursae maj.	4.5	9 26	48.665	+5.3626		121	+70	12	48.90	-15.658	+ 75
358 359		3.1	9 27	2.783 16.222	+4.0313		1028	+52	4	28.03	-16.292	-547
	[N Velorum]	3.0	9 28	34.704	+2.3601 +1.8228	-	36	-56	39	0.59	-15.826	+ 1

Nr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o*.ooi	Dekl. 1	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew.in Einh. von o".oo1
260	10 Leon. min.	4.6	h 28	m s	+3.6859	T2	+26° 1'	7 280	-15.870	– 2 6
	[H Carinae]	5.8			+0.4697				-15.971	- 17
363	[Gr. 1564]	5.9			+5.1904				-16.230	
364	[z Hydrae]	5.1	9 36		+2.8760				-16.235	
365	[o Leonis]	3.8	9 36		+3.2053				-16.281	- 37
366	9 Antliae	5.0	9 40	10.363	+2.6725	_ 40	—27 23	2 14.70	-16.402	+ 35
367	ε Leonis	3.0		,	+3.4116				-16.484	
368	o Ursae maj.	3.8			+4.2940				-16.813	
369	o Argus	3.0			+1.5013		-64 40		-16.665	
370	6 Sextantis	6.2			+3.0242	_	- 3 50		-16.787	
371	[µ Leonis]	4.0	9 47	49.128	+3.4184	-162	+26 2	5 1.94	-16.859	- 57
372	Gr. 1586	6.3			+5.4367				-16.982	1
373	[Hydrae 183 G.]	5.5	9 50	46.006	+2.8298	- 24			-17.009	
37+	[19 Leon. min.]	5.2	9 52	21.691	+3.6869	100			-17.044	
375	[φ Argus]	3.7	9 53	48.394	+2.1027	— 2 I	-54	9 12.06	-17.085	- 2
377	[η Antliae]	5.3	9 55	8.206	+2.5707	— 83	-35 2	8 27.11	-17.168	- 24
376	[12 Sextantis]	6.7	9 55	12.375	+3.1138	— 47	+ 3 4	8 4.11	-17.120	+ 27
378	π Leonis	4.9	9 55	37.049	+3.1732	_ 21	+ 8 2	7 43.39	-17.190	- 25
379	η Leonis	3.4	10 2		+3.2750		+17 I	1 14.30	-17.478	- 6
380	α Leonis	1.3	10 3	44.430	+3.1986	-167	+12 2	3 33.99	-17.522	— I
381	λ Hydrae	3.7	10 6		+2.9249		—II 5	5 25.23	-17.718	- 87
382	q Velorum	3.9	10 11		+2.5126		-41 4			
3 85	[w Argus]	3.4			+1.4333				-17.848	
383	λ Ursae maj.	3.4			+3.6312		+43 2			
384	ζ Leonis	3.4	10 11	51.268	+3.3427	+ 15	+23 5	1 4.61	-17.863	7
386	μ Ursae maj.	3.0	10 17		+3.5865				-18.037	
387	30 H. Urs. maj.	5.0	10 17		+4.3641				-18.107	
388		6.2	10 19		+3.0324		- 3 3			
389	μ Hydrae	3.9		-	+2.9000		-16 2			
391	J Carinae	4.1	10 22	40.210	+1.1964	- 67		5 18.80		
390		4.2			+3.4795	-			-18.378	
392	Lac. a Antliae	4.2			+2.7420				-18.273	
393		4.I			+2.1954					
394					1-+3.8613				-18.384	
395		1			+5.1886				-18.448	
396					+3.1610					
397					7 + 2.1286					
	[37 Ursae maj.]				1 +3.8882					
	[44 Hydrae]				+2.8519					
400	[p Velorum]	4.0	110 33	38.46	1+2.5129	-183	-47 4	0 24.79	-18.07	3 - 34

Nr.	N a m c	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o ^s .com	Dekl	. 1 <i>9</i>)13.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
101	[γ Chamael.]	4.2	h TO 2	1 ¹¹ 26 008	+0.7371	_116	78°	0	22.88	-18.635	+ 30
	[x Velorum]	4.4			+2.3760			9		-18.73	
	[35 H. Urs.maj.]				+4.3412					-18.759	
	33 Sextantis	6.6			3.0526		— I	-	, , ,	-18.870	
	[41 Leon. min.]	5.2			+3.2678					-18.785	
406	∂ Argus	2.8	10 3	51.025	+2.1337	_ 26	<u>_63</u>	56	18.20	-18.828	+ 4
407		5.3	10 4		+3.3438		+31			-18.905	
408	μ Argus	2.7	10 4		+2.5715	_				-18.990	
409	l Leonis	5.4			+3.1562		+11			-19.003	
411		4.7			+0.6036		80			-18.972	
410	[v Hydrae]	3.2	10 4	5 19.888	+2.9586	+ 66	_15	44	17.42	18.797	+195
	[46 Leon. min.]	3.9			+3.3642					-19.359	
414	[t Antliae]	4.9			+2.7906						
413	[Br. 1508]	6.4			+4.8953						
415	i Velorum	4.5	10 5		+2.7465						
416	β Ursae maj.	2.3	10 5	6 26.004	+3.6415	+101	+56	50	56.29	-19.257	+ 26
417		1.8			3.7291					19.397	
418	y Leonis	4.8			+3.0965					19.420	
419	[x Hydrae]	4.8	1		+2.8856						
420	ψ Ursae maj.	3.0	II		+3.3854		1		_	-19.502	
421	β Crateris	4.3	ΙI	7 22.644	+2.9475	0	-22	21	2.30	_19.617	- 98
422	ò Leonis	2.4			+3.1954			0		-19.697	
123	9 Leonis	3.3			3.1513					-19.646	
424	[Gr. 1757]	6.1			+3.3948		+49			-19.627	
425	ν Ursae maj.	3.4			+3.2486		+33			-19.618	
426	o Crateris	3.6	11 1	4 59.388	+2.9972	- 88	_14	18	27.35	—19.46 c	-1-200
427	σ Leonis	4.I			+3.0950				, 55	-19.700	1
428	π Centauri	4.1	II I		+2.7255					-19.708	
429	Gr. 1771	6.2			+3.5929					-19.671	
430	[t Leonis]	4.0			+3.1290		+11		30.75		
431	[y Crateris]	4.0	II 2	0 32.012	+2.9945	72	-17	12	21.55	-19.743	+ 7
	[58 Ursae maj.]	6.1			+ 3.2577					19.751	
433	λ Draconis				+3.5978						
434					+2.9450						
435		5.5	11 3	r 42.261	+2.8964	+ 13	-47	9	32.66	-19.940	- 47
436		3.3			+2.7508	1					
437		4.4			+3.0717						
438		6.1			-2.4559						
439		4.8			+2.9740						
440					+3.3749						

Nr.	N a m e	Gr.	A	R. :	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew.in Einh. von o°.coor	Dek	l. 1	913.0	Jährl. Verände- rung	Jährl. Eigen- bew.in Einh. von o".001
441	y Ursae maj.	3.8	11	4 T	27.601	+3.1802	—I24	-+-18 [°]	15	42.55	—19.̈961	+ 20
	[\lambda Muscae]	3.7									-19.960	
	[Centauri65G.]					+2.8863					-20.021	
111	β Leonis	2.1									-20.119	
445	β Virginis	3.5		46							-20.285	
	[B Centauri]	4.8	TT	16	17 272	+2.9853		44	4 T	22 26	-20.059	- 46
147	γ Ursae maj.	2.3				+3.1701						
448	[z Chamael.]	5.0				+2.9301						
	[Centauri88G.]		II	59		+3.0948						
450	o Virginis	4.I	12			+3.0571						
		6.0	1									
451	[Gr. 1852] 8 Centauri	2.7	12			+3.0945 +3.0951				16.32		
452	ε Corvi	3.0	12	-		+3.0951			8	9.30		
453 454	4 II.Draconis	_	12	5 8		+2.8498				58.76	_	
455	[3 Crucis]	3.0				+3.1666						3
		1	1									
456	d Ursae maj.	3.4	•	11		+2.9843				_		
457	[7 Corvi]	2.4				+3.0816				32.15		,
458	[2 Can. ven.]	5.9				+3.0152						
459	β Chamael.	4.4				+3.4485 +3.0687				-		
460	η Virginis	3.7						— o		0.21	-20.023	- 23
461	[6 Can. ven.]	5.3				+2.9624		+39				— 36
462	α Crucis md.	1.0	12	21	45.304	+3.3127	— 44	62	37	2.57		- 31
	Hydr. 323 G.]					+3.1533						- 49
464	[σ Centauri]	4.I				+3.2294					-19.975	- 33
466	20 Comae	6.0	12	25	21.105	+3.0174	+ 26	+21	22	39.86	-19.962	- 39
465	5 Corvi	2.8	12	25	21.642	+3.1005	-145	—1 6	I	52.25	-20.065	-142
467[[74 Ursae maj.]	5.6				+2.8133		+58		3.50		+ 88
468	[γ Crucis]	1.6	12	26	19.931	+3.3077			37	34.31	-20.191	-278
469	[y Muscae]	3.9				+3.5425				9.27		
470	8 Can. ven.	4.3	12	29	36.861	+2.8559	625	+41	49	48.17	-19.599	+280
472	z Draconis	3.6	12	29	46.567	+2.5781	117	+70	16	3.60	-19.869	+ 7
471	β Corvi	2.6		-		+3.1454				56.74		- 59
	24 Comac seq.	5.1									- 19.847	
474	a Muscae					+3.5427					-19.883	
475	[y Virginis]					+3.0943					-19.853	
476	γ Centauri					+3.2929					19.809	
	[γ Virgin. m.]										19.776	
	76 Ursae maj.					+2.6342					-19.79I	
	[Hydr. 330 G.]										-19.801	
	[β Muscae]					+3.6442						

Nr.	N a m o	Gr.	AR	. 1913.0	Jährl. Verände- rung	Jährl. Eigenbew. in Einh. von o*.0001	Del	il. 1	913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
481	β Crucis	1.4	h	2 27 72	 +3.4814	- 50		° 12	17.02	10 727	27
482	n Centauri	4.4			+3.3107		•		-		
483	ε Ursac maj.	1.7			+2.6486					- 19.578	
484	o Virginis	3.4			+3.0210					19.610	
485	12Can.ven.sq.	2.8			2.8113					-19.482	
486	8 Draconis	5.2	12 5		+2.3984					-19.565	
487	[6 Muscae]	3.6	_		+4.0730		7I			19.481	
488	a Virginis	2.8			+2.9866					-19.393	
489	[ξ² Centauri]	4.3			+-3.4852						
490	9 Virginis	4.3			+3.1036		- 5		29.32		
491	[17 Can. ven.]	6.1	_		+2.7595				39.53	-19.187	
491	43 Comae	4.2			+2.7595 +2.8024	602			8.03		+ 32 +879
493	[n Muscae]	5.0			+4.0274				1.89		17
494	[20 Can. ven.]	4.6			+2.6945				49.03	- 5	
495	γ Hydrae	3.1	-		+3.2556				46.39	19.058	- 53
					0 00	_					
496	ι Centauri ζ Urs. maj.pr.	2.9			+3.3611 +2.4215						92
497	α Virginis	2.2 I.I			+3.1569						25
498 499	Gr. 2001	6.2	-		+1.5263			-			00
500	69 II. Urs. maj.	5.5	_		+2.2067				41.65	-18.637	I5 + 37
			-					-			
501	ζ Virginis	3.3			+3.0549		- 0	9		-18.476	
502	17 H. Can.ven.	4.9			+2.6810						14
-	[Chamael.49G.]	6.4				- 49 27				—18.475 —18.404	[1]
504	ε Centauri [Gr. 2029]	2.4	_		+3.7792 +1.4365		-53 + 71			-18.345	- 34
505		5.9	13 3								0
506	[i Centauri]	4.3	-		+3.3992					-18.296	-156
507	τ Bootis	4.5	13 4		+2.8509					-18.022	29
509	η Ursae maj.	1.8	13 4		+2.3680		-			-18.033	- 20
508	[u. Centauri]	3.3	_		+3.5997		-42			-18.022	- 19
510	89 Virginis	5.2	13 4		+3.2545		_17		-	110.81—	38
511	[i Draconis]	4.8	13 48		+1.7524		+65			-17.828	— 2
512	ζ Centauri	2.6	13 50	6.291		- 70	46	51	37.95	-17.837	60
513	η Bootis	2.8	13 50	32.537	+2.8570	- 42	- -18	50	0.35	18.123	-364
	[Cent. 294 G.]				+4.3065						
	[47 Hydrae]				+3.3595						
5.16	τ Virginis				+3.0514						
-	II Bootis	6.3	13 57	7 13.830	+2.7219	— 57 ·	+27	48	22.99	-17.472	+ 8
518	β Cen t auri	I	13 57	40.396	+4.2045	— 28 J	 59	57	13.89	-17.501	- 40
519	[\pi Hydrae]	3.4			+3.4088						
520	9 Centauri	2.1	14	33.419	+3.5188	-439	35	56	32.80	-17.822	-530

Nr.	N a m e	Gr.	AF	₹. 1	913.0	Jährl. Verände- rung	Eig be E	hrl. gen- w.in inh. on	Dekl	. 19)13.0	Jährl. Verände- rung	Jäh Eig bew Ein vo	en- z.in ih. on
521	α Draconis	3.4	h T4	2	T.082	+1.6231		82	-1.64	17	20.17	-17.254		17
522	d Bootis	7.9				+2.7373						-17.141		69
523	z Virginis	4.2				+3.1964			— 9			-16.854		134
524	4 Ursae min.	5.0				-0.2851			+77		-	-16.913		32
525	ι Virginis	-				+3.1421		14		35		-17.269		431
5 2 6	α Bootis	I	14			+2.7357		778	+19		5 72	18.826	2	000
527	λ Bootis		14			+2.2826						-16.608		
528	[t Bootis]		14	-		+2.1261		. ,	+51	-		-16.674		86
529	[v Centauri]	٠.		-		+4.1626		-35 47				-16.744		39
530	[Circini 10 G.]					+4.9218		41	-			-16.562		36
531	9 Bootis	3.0	14	22	14.132	+2.0431	-	257	+52	15	0.01	-16.712	-	404
532	[52 Hydrae]		14			+3.5045		28		6	-	-16.295		30
533	[φ Virginis]	1 -			/	+3.0887		90	_			-16. 23 9		7
534	p Bootis					+2.5863						15.892		,
535	γ Bootis					+2.4171						-15.834		145
536	[Gr. 2125]	6.4	14	29	21.076	+1.6278		59	+60	36	31.32	15.919	+	19
537	η Centauri					+3.7956						-15.941		36
538	α Centauri ⁴)					+4.0521		4870	-60	28	36.95	-14.990	+	715
539	[a Circini]	3.3	14	35	27.627	+4.8064		320	-64	35	48.99	-15.846	Silver a	238
540	[33 Bootis]	5.5	14	35	35.977	+2.2331	-	68	+44	46	46.69	-15.626		26
541	[a Lupi]	2.4	14	36	8.203	+3.9736	_	20	-47	0	55.58	-15.607		36
543	ζ Bootis m.	3.6	14	36	59.622	+2.8639	+	37	+14			-15.550		27
542	α Apodis	3.8	14	36	59.893	+7. 2 894	-	57	-78	40	35.84	-15.558	_	35
544	$[c^1 \text{ Centauri}]$	4.1	14	38	19.862	+3.6583		61	-34	47	58.93	-15.647	-	198
545	μ. Virginis	3.9	14	38	28.398	+3.1582	+	69	- 5	16	50.04	-15.768	-	327
546	[b Lupi]	5.9	14	40	55.693	+4.1756	-	24	-52	0	57.48	-15.396		92
547	109 Virginis	3.7	14	4 T	50.952	+3.0309		75	+ 2	15	31.94	-15.291	-	39
548	α Librae	2.7	14	46	3.754	+3.3135	-	77	15	40	51.11	-15.083	_	73
549	Gr. 2164					+1.5195						14.695	+	130
550	β Ursae min.	2.0	14	50	56.788	-0.2079)	78	+74	30	39.85	-14.716	+-	7
551	P. XIV, 221		14	_	,	+2.8307		IC	+14	47		<u>—14.672</u>		18
552	β Lupi					+3.9143			-42			<u>-14.672</u>		60
553		3.2	14	53	29.744	+3.8898	-	21	41	45	20.68	-14.604	-	33
	[2 II. Urs. min.]	4.8	14	56	11.710	+0.9433	3					-14.374		34
555		1 -		-		+2.2600			1			-14.299		43
556						+3.5044						-14.293		55
557						+2.5705						-14.145		15
558			15			+4.2899						-13.870		72
559			15			+3.4138						-13.766		47
561	[β Circini]	14.2	15	10	41.506	1+4.6704	-	130	-58	28	37.51	-13.647	-	149

Nr.	N a m e	Gr.	Λ	R.	1913.0	Jährl. Verände- rung	Jährl. Eigenbew. in Einh. von o ⁸ .ccoi	Dek	l. 1	913.0	Jährl. Verände- rung	Ei be E	hrl. gen- w. in inh. on
	γ Triang. austr. [3 Serpentis] . δ Bootis β Librae 1 H. Urs. min	5·5 3·2 2·5	15 15 15	10 11 12	51.810 59.717 19.396	+5.5535 +2.9803 +2.4191 +3.2247 +0.6770	— 12 + 73 — 64	+ 5 +33 - 9	15 38 3	42.02 19.80 45.30	-13.494 -13.535 -13.419	_	37 7 122 27 396
566 569 568 570		3.5 3.0 4.1 5.5	15 15 15	16 20 21 21	16.841 51.433 12.208 45.246	+3.7965 -0.1184 +2.2661 +2.7813 +6.4649	- 82 - 32 123 11	-35 +72 +37 +15	56 8 40 43	47·37 36.84 54·29 59·78	-13.227 -12.811	- + + -	95 16 81 24 37
571 572 573 574 575	t Draconis β Coron, bor, ν¹ Bootis [ε Triang, austr.] γ Lupi	3.7 4.8 4.3	15 15 15	24 27 28	14.514 48.240 44.604	+1.3313 +2.4736 +2.1546 +5.4496 +3.9855	-131 + 10 + 29	+29 +41 -66	24 7 1	18.06 44.81 31.76	—12.523 —12.368	+	14 76 13 82 39
576 577 578 579 580	[θ Coron. bor.] γ Librae α Coron. bor. [3 II. Scorpii] [φ Bootis]	4.1 4.1 2.2 3.9	15 15 15	29 30 31 31	25.260 39.425 0.237 44.329	+2.4185 +3.3517 +2.5397 +3.6348 +2.1544	- 17 + 43 + 93 - 11	+3I -14 +27 -27	39 30 0	7.64 0.15 24.73 51.68	—12.269 —12.154 —12.232 —12.093	 -+ 	26 3 98 11 52
581 582 583 584 585	[γ Coron. bor.] α Serpentis β Serpentis χ Serpentis ρ Serpentis	3.8 2.5 3.4	15 15 15	39 39 42 44	5·343 58.894 10.306 49·387	+2.5192 +2.9532 +2.7680 +2.6998 +3.1281	- 74 + 91 + 51 - 31	+26 + 6 +15 +18	34 41 41 24	14.11 55.18 36.24 34.40	—11.529 —11.457 —11.396	+	34 42 55 98 31
587 [586: 588 590	[12 H. Dracon.]	5·3 4·1 3·5 4·3	15 15 15 15	45 45 46 47	20.217 25.558 28.679 8.391	+0.9076 +3.8036 +2.9885 -2.2099 -+5.2565	+ 55 - 15 + 84 + 60	+62 -33 + 4 +78	52 21 44 3	5.45 46.25 19.99 45.45	11.174 11.136 10.970	+	62 30 59 1
591	[γ Serpentis] [π Scorpii] ε Coron. bor. δ Scorpii [Gr. 2296]	3.7 4.1 4.0 2.3	15 15 15	52 53 53 55	26.019 35.110 59.095 11.178	+2.7696 +3.6229 +2.4826 +3.5423 +1.4194	+212 - 15 - 61 - 8	+15 -25 $+27$ -22	56 51 7 22	41.39 52.31 44.96 29.88	-11.885 -10.542 -10.543 -10.422	_ I	295 37 68 36
598: 596: 597: 599:		3.8 4.8	16 16 16	0 0 0	15.433 - 20.216 - 22.529 - 52.476 -	+1.1204 +4.2279 +3.4836 +3.9301 +1.8891	-402 - 5 - 7 - 29	+58 -44 -19 -36	47 56 34 33	50.40 17.40 5.33 58.58	— 9.663 — 9.991 —10.021	+	

Nr.	N a m e	Gr.	Ai	₹. 1	913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einli. von o*.0001	Dekl	. 19	13.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
	[z Normae]		16h			+4.7116						— 65
	[8 Triang.austr.]			-		+5.4336						— 2 6
606	δ Ophiuchi 19 Ursae min.		16			+3.1414					-9.422 -8.988	-150 + 12
604	γ ² Normae					-1.7519 +4.4739				34.83		-61
•			١	-	-		-	1				
605	ε Ophiuchi					+3.1716					-8.935	+ 31
607 608	[σ Scorpii] τ Herculis	-	16			+3.6413 +1.8021					-8.829	- 33
609		-	16			+2.6451					8.666 8.583	+ 32 + 40
	[Carriang.austr.]					+6.4110					-8.461	+ 83
		_		-	-				-			
612	-1					-1.7913						+256
613	γ Apodis [ω Herculis]										-8.536 -8.429	- 7º - 68
614											-8.429 -8.254	
615											-8.188	+ 61
	•		1					1				
616	L L										-8.176	28
617						+2.5780					-7.975 -8.041	2I 90
619	_	3.7	16	28	8 826	-3.0237	- 23	168	10	22.04	-7.786	+ 35
620											-7.667	-33
				-		0, -						
621 622											-7.528	+ 38
623	_										-7.457 -7.042	
_	[24 Scorpii]										-7.142	
	α Triang. austr.					+6.3221					-6.951	- 49
_							_	1	-			
626 627						+2.0561					-6.947	
628						+1.1352 +3.8798					6.498 -6.737	
629	-					+2.7303					-6.191	
630											-6.394	
-	1											
631	ζ Arae [ε¹ Arae]	3.0				+4.9529					-5.957 -5.815	
-	α Ophiuchi	4.0	16	54	30.04	1 4.709	19	-53	10 T		-5.015 -5.744	
	ε Herculis	2.6	16	25	57.620	1 2 204	190	T 9	30	34.4	-5.421	— 13 — 24
	[60 Herculis]		17								-5.421	
							-		_			
636 637			17								7 - 4.798	
638		2.4	17	5	23.220	+3.4379	23	1-15	37	4.9	8 —4.641 6 —4.984	-208
639			17	2	27.02	1 165	1 28	43	/ /	18.10	-4.964 -4.442	1 22
640				IO	40.78	7 -1-2 724	1 — 8	+11	20	10.4	$\frac{-4.442}{3}$	1 20

Nr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o*.com	Dekl.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o"
641 643 642 644 645	δ Herculis π Herculis [ι Apodis] θ Ophiuchi β Arab	3.1 5.7 3.2	17 12 17 12	0.986 23.149 39.886	+2.4635 +2.0888 +6.6704 +3.6816 +4.9796	- 21 - 14 - 7	+36 -70 -24	56 28."0; 54 23.82 1 59.2; 54 48.86 26 55.6;	-4.161 -3.792	-159 + 1 - 27 - 25
646	[d Ophiuchi] [27 H. Ophiuchi] 5 Arae [w Herculis] [v Scorpii]	4.5 4.5 3.6 6.0	17 21 17 22 17 23 17 24	47.815 0.869 14.520 25.850	+3.8276 +3.1823 +5.4080 +1.5892 +4.0737	+ 6 - 58 - 7° + 2	29 5 60 +-48	47 21 .00	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 42 145 51 101 19 39
651 652 653 655 657	α Arae λ Scorpii β Draconis [ν¹ Draconis] [ν² Draconis]	2.8 1.7 2.7 4.7	17 25 17 27 17 28 17 30	6.828 41.915 27.981 27.746	+4.6323 +4.0698 +1.3543 +1.1803 +1.1815	- 39 - 14 - 15 +176	-49 -37 +52 +55	48 29.85 2 28.55 21 55.30 14 35.96	-3.133 2.848 2.740 2.526 2.517	- 94 - 32 + 10 + 51 -+ 52
656 654 659 658 660	α Ophiuchi ϑ Scorpii [f Draconis] ξ Serpentis [z Scorpii]	2.1 1.9	17 30 17 31 17 32 17 32	53.717 3.898 18.587 36.231	+2.7837 +4.3064 -0.2458 +3.4332 +4.1471	+ 79 o - 32 - 34	+12 -42 +68	37 21.24 56 36.65 11 25.85 20 40.76	$ \begin{array}{c cccc} & -2.772 \\ & -2.542 \\ & -2.282 \\ & -2.455 \end{array} $	-233 - 18 +134 - 64 - 26
663 661 662 664 665			17 37 17 37 17 37 17 37	0.504 11.429 14.081	+1.6927 +5.8814 +4.7589 -0.3546 +2.9627	- 5 - 22 - 29 + 13	+46 -64 -51 +68	3 7·3' 41 0.0: 47 19·5' 47 53·7'		- 4 - 56 208 +323 +-153
666 667 670 668 669	[t¹ Scorpii] μ Herculis ψ Drac. austr. [γ Ophiuchi] [G Scorpii]	I -	17 41 17 43 17 43 17 43	29.870 3.159 28.961 31.790	+4.1930 +2.3466 -1.0741	- 10 -242 + 28 - 16	-4° +27 +72	5 38.9 46 15.2 11 30.5 44 21.0	7 —1.619 6 —2.231 5 —1.710 8 —1.517	
671 672 675 673 674	y Ophiuchi	3.8 5.1 3.4	17 53 17 54	3 16.141 3 20.509 1 14.18 <u>9</u>	-2.6903 +3.3018	+ 4 +118 - 7	+37 +76 - 9	15 41.2 58 30.0 45 49.4	6 —0.621 3 —0.584 4 —0.341 1 —0.622 8 —0.517	+ 5
676 677 678 679 680	[Apodis 66 G.]	4.0 6.0	17 50 17 50 18 6	5.237 5.237 5.237		0 - 49 - 48	+ 2 -75 -30	56 5.8 53 42.4 25 33.9	8 —0.496 3 —0.338 1 —0.349 0 —0.175 2 —0.361	- 13 270 194

Nr.	N a m e	Gr.	Λ	.R.	1913.0	Jährl. Verände- rung	Ei be E	thrl. gen- w. in inh. on	Dek	l. 1	913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
681	o Herculis	3.8	18	h 1	" 8 oro	+2.3398	_1_	2	_ <u></u> -⊢28	0 11	59.32	+0.363	0
682	p. Sagittarii		18	8		+3.5872		3			57.07		- 3
683	[η Sagittarii]	1 /				+4.0589							163
684	[Gr. 2533]					+1.8652	_		+42			+1.124	7
685	[36 Draconis]	5.0				+0.3454	+						+ 29
686	[\$ Pavonis]	4.2	18	15	12.518	+5.5295		26	6 1	32	3.75	+1.346	- - 17
687	[o Sagittarii]	2.7	18	15	25.455	+3.8410	+	27	-29	51	57.45	+1.316	32
688	η Serpentis					+3.1034		373	- 2	55	20.07	+0.771	698
689	ε Sagittarii	1.9				-+-3.9826					35.75	+1.480	127
690	109 Herculis	3.9	18	19	59.421	-+-2.5560	+-	140	+21	43	45.75	+1.489	2 57
691	α Telescopii	3.7	18	20	31.358	+4.4496	_	21	— 46	I	2.07	+1.745	- 47
693	[\varphi Draconis]	4.3				-0.8572		17	+71	17	30.10	+1.955	+ 33
692	[λ Sagittarii]	2.8			_	+3.7024		37				+1.786	-188
695	χ Draconis					-1.0794	+1					+1.611	- 365
694	b Draconis	5.1	18	22	38.416	+0.8765	_	45	- +58	45	0.03	+2.036	+ 59
696	[2 II. Scuti]		18	24	14.326	+3.4190	_	3	-14	37	19.39	+2.118	+ 2
697	[] Coron. austr.]	4.7	18	27	17.407	+4.2847	+	14	-42	22	34.00	+2.358	24
698	ζ Pavonis					+7.0240							-178
700	[Gr. 2655]	6.1				-2.88 06					47.51	-1-2.957	- 3
699	α Lyrae	I	18	33	59.557	+2.0312	+	176	+38	42	7.51	+3.243	+-281
701	[Gr. 2640]	6.2	18	35	56.920	+0.7900	+	19	+-65	24	38.66	+3.216	+-84
702	[5 II. Scuti]	5-1				-1-3.2675	-	13				-+3.386	+ 9
	110 Herculis							12				-1-3.306	-340
794	λ Pavonis					1-5.5672		26				+3.811	- 27
705	β Lyrae	(3.3)	18	46	52.064	-1-2.2146	+	3	-1-33	15	39.93	+4.069	2
706	ร Sagittarii	2.1	181	49	52.271	+3.7209	+	4	26	24	20.55	+4.265	- 63
707	o Draconis					+0.8872		105	+59	16	54.20	+4.356	+ 24
708	λ Telescopii					+4.8051		3	-53			+4.482	+ 14
709	θ Serpent. pr.		-	-		+2.9824			+ 4			+4.528	+ 28
710	[ξ Sagittarii]	3.6	18	52	32.416	+3.5797	+	18	-2I	13	18.77	+4.539	— 16
711	R Lyrae					+1.8262						+4.644	+ 76
714	[v Draconis]					-0.7241	+						+ 40
712	[ɛ Aquilae]					+2.7220						4.742	— 8 0
713	γ Lyrae					+2.2436	-	- 1					2
715	[ζ Sagittarii]	2.7	18	-		+3.8185		21	-30	0	19.07	+4.943	+ 2
716	ζ Aquilae	3.0	19	1	24.673	+2.7569	-	7	+13	44	0.10	2 1	101
717	λ Aquilae	3.2	-			+3.1840		16		0	49.66	+5.239	- 87
718	α Coron, austr.	4.I	_			+4.0842	- -	59	38			+5.378	109
719	[t Lyrae]	5.2				+2.1405		- 1				-F5.538	3
720	π Sagittarii	2.9	19	4	35.435	+3.5690	-	5	-21	9	45.01	-1-5.540	35

Nr.	N a m e	Gr. AR. 1913.0 V	Jährl. Verände- rung	Eig bev Eig	hrl. gen- w. in nh. on	Dekl	. 19	13.0	Jährl. Verände- rung	Jähr Eiger bew. Einh von o".oo	n- in 1.			
721	[Pavonis 60 G.]	5.7	IQ h	8 ⁿ	27.581	+6.0535	_	7	_66°	48	44.57	+ 5.878	_ :	21
723	8 Draconis											+6.327	+ 8	87
722	[d Sagittarii]					+3.5113						+ 6.231	_	9
724	9 Lyrae	4.3	19	13	20.876	+2.0816		7	+37	58	41.44	+ 6.305	_	1
725	ω Aquilae	5.4	19	13	43.968	+2.8158		3	+11	26	15.99	+6.352	+ :	13
726	z Cygni	3.8	19	15	5.567	+1.3877	-+-	69	+53	12	27.03	+ 6.571	+ 1	19
727	[v Sagittarii]		1 -			+3.4374			16	7		+ 6.586		2
729	τ Draconis								+73	II	39.44	+6.738	+ 1	10
728	α Sagittarii	4.0	19	17	51.610	+4.1612	+	18	40	46	49.66	+6.562	I	18
730	o Aquilae	3.3	19	21	6.721	+3.0249	+	168	+ 2	56	25.94	+ 7.028	+ :	81
731	[Sagittar. 186 G.]	5.8	19	21	26.673	+3.7942	+	7	29	54	57.92	+6.928		47
734	[Gr. 29 00]					-3.5694						+ 7.391		35
732	β Cygni	3.0	19	27	12.748	+2.4189	-	2	+27	46	34.66	+ 7.438		8
733	ι Cygni	3.9	19	27	30.775	+1.5133	+	23	+51	32	38.20	+ 7.594	+ 1	25
735	[t Telescopii]	5.1	19	28	45.840	+4.4567	-	42	48	17	15.31	+ 7.531		40
736	h Sagittarii	4.6	19	31	24.859	+3.6534	-+	46	25	4	35.20	+ 7.763		22
737	[z Aquilae]					+3.2287		3	_			+ 7.850		0
738						J-1.6085		_	+50			+ 8.249		47
739						+4.9127		86	56			+ 8.408		37
740	[15 Cygni]	5.2	19	41	8.323	+2.1631	+	59	+37	8	37.09	+ 8.597	+	35
741	γ Aquilae	2.7	19	42	7.413	+2.8521	+	9	+10	24	2.02	+ 8.639		0
742		,		-		+1.8756			+44			+ 8.690		39
743						+2.6749						+ 8.762		13
744	[51 Aquilae]	5.8				+3.3026			IO			+ 8.985		41
745	α Aquilae	I	19	46	32.309	+2.9271	+	360	+ 8	38	16.25	+ 9.369	+ 3	82
746	[η Aquilae]	(4.0)	10	48	2.497	+3.0569	-	6	+ 0	46	53.75	+ 9.095	_	9
747												+9.167		29
748		3.8				+6.9941						+ 9.167		32
749		3.7	19	-								+8.857		80
750		5.0	19	53	22.855	+1.5516	j	43	+52	12	27.17	+ 9.487	_	31
751	91 Sagittarii	4.3	19	54	4.533	+3.9094	1	12	-35	30	44,40	+ 9.535		3 6
752	_					+2.667				_		+ 9.657		24
753		1 -		_		+3.6929		_	1	-	_	+ 9.836		18
754												+8.873		
755			20			+4.6086			-53			+10.076		2
756		3.1	20			+3.0962	1					7-+10.540		5
757		-				+1.889						1-10.837		I
	[33 Cygni]					+1.396						+10.957		85
759						-1.9630						1+10.933		27
	24 Vulpecul.					+2.5669						+10.976		19

Nr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o*	Dekl. 1	913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".∞1
761	α ² Capricorni				+3.3307				+11.019	
762	[β Capricorni]		20 16		+3.3728				+11.224	
763 764	[κ¹ Sagittarii] α Pavonis				+4.0837				+11.154 +11.325	— 96 — 85
765	γ Cygni		20 19		+4.7666 +2.1526				+11.434	
- 1		_								
766 767	[p Capricorni]				+3.4248	-	−18 6 +62 42	//	-11.760	
768	θ Cephei ε Delphini	4.I 3.9	20 28 20 29		+1.0117 +2.8662				+12.058 +12.113	
769	α Jndi	3.0	-		+4.2312			-	+12.363	_
770	73 Draconis	5.3			-0.7550				+12.376	
771	β Delphini	3.5			+2.8131				+12.406	— 36
772	[z Delphini]	5.I			+2.9140				+12.558	
773	u Capricorni	5.5	20 35		+3.4183				- 	_ 16
774	α Delphini				+2.7866				+12.582	– 6
775	β Pavonis	3.3	20 37	7.939	+5.4463	- 71	66 31	0.26	+12.694	+ 2
776	[4.8	20 37	39.359	+.1.1209	+ 157	-52 13	57.24	+12.654	- 73
777	a Cygni				- -2.0447				+12.781	- 1
778	[o Delphini]				+2.8008		+14 45	42.54	12.797	- 48
779	[\$ Capricorni]			-	+3.5566				+12.791	
780	ε Cygni	2.4	20 42	41.437	+2.4270	+ 290	+33 38	37.83	+13.392	+ 327
781	ε Aquarii				+3.2495		9 48	53.47	+13.055	28
782	[6 H. Cephei]				- FI .4900				+12.864	- 234
783	η Cephei		_		+1.2250				+13.938	+ 818
784	λ Cygni		20 44		+2.3358				+13.152	0
785	β Jndi	3.6	20 48	1.070	+4.7112	0	58 40	59.13	-⊦13.387	- 27
	32 Vulpeculae		-	-	+-2.5561				+13.599	
788	v Cygni				+2.2355	-			+13.777	
787	[a Octantis] [11 Aquarii]				+7.3882	– 19			+13.457	355
790	ζ Microscopii	6.4 5.4			+3.1602 +3.8420	+ 23 - 36	= 5 4 = 28 £8		+13.791 +13.892	- 133 - 122
792	[\$ Cygni] [A Capricorni] :	3.9 4.6			+2.1814 +3.5134			_	+14.280	- 3
	61 Cygni pr.	5.4			+2.6860	— 30 +2505			+14.253	— 47 -⊢225 I
794	v Aquarii	4.4			+3.2707					
795	Br. 2777	6.0			-1.1406					
797	ζ Cygni	3.1			+2.5520			1	+14.675	
796	[Jndi 23 G.]	5.9			+4.2989					
798	[Gr. 3415]	5.8			1.5284				+14.753	
799	[\tau Cygni]				+2.3935					
800	∞ Equulei				-1-2.9997				+14.779	

803	Nr.	N a m e	Gr.	A	R.	1913.0	Jährl. Verände- rung	Ei, be E v	hrl. gen- w. in inh. on	Dek	i. 1	1913.0	Jährl. Verände- rung	Ei ber Ei	hrl. gen- v. in nh. on
802 [θ¹ Microscop.] 803 α Cephei 804 I Pegasi 805 γ Pavonis 806 ⟨ Capricorni 807 [g Cygni] 808 β Aquarii 809 β Cephei 810 ν Octantis 811 γ Cygni 812 [γ Capricorni] 813 [13 H. Cephei] 814 [ε Pisc.austr.] 815 ε Pegasi 816 [κ Capricorni] 816 [κ Capricorni] 817 [II Cephei] 818 [κ Capricorni] 819 δ Capricorni 810 [κ Cygni] 811 [α Cephei] 812 [α Capricorni] 813 [α Cephei] 814 [α Cephei] 815 ε Pegasi 815 ε Pegasi 816 [κ Capricorni] 817 [α Cygni] 818 [κ Capricorni] 819 δ Capricorni] 810 [α Cygni] 811 [α Cephei] 812 [α Cephei] 813 [α Cephei] 814 [α Cephei] 815 [α Capricorni] 816 [α Capricorni] 817 [α Cygni] 818 [α Capricorni] 819 δ Capricorni [α Cygni] 810 [α Cygni] 811 [α Cephei] 812 [α Cygni] 813 [α Cephei] 814 [α Cephei] 815 [α Capricorni] 815 [α Capricorni] 816 [α Capricorni] 817 [α Cygni] 818 [α Capricorni] 819 δ Capricorni [α Cygni] 810 [α Cygni] 811 [α Cygni] 812 [α Cygni] 813 [α Cygni] 814 [α Cephei] 815 [α Capricorni] 816 [α Capricorni] 817 [α Cygni] 818 [α Capricorni] 819 δ Capricorni [α Cygni] 810 [α Cygni] 811 [α Cygni] 812 [α Cygni] 813 [α Cygni] 814 [α Cygni] 815 [α Cygni] 815 [α Cygni] 816 [α Capricorni] 817 [α Cygni] 818 [α Capricorni] 819 δ Cygni] 810 [α Cygni] 811 [α Cygni] 812 [α Cygni] 813 [α Cygni] 814 [α Cygni] 815 [α Cygni] 815 [α Cygni] 816 [α Cygni] 817 [α Cygni] 817 [α Cygni] 818 [α Cygni] 819 [α Cygni] 810 [α Cygni] 811 [α Cygni] 812 [α Cygni] 813 [α Cygni] 814 [α Cygni] 815 [α Cygni] 816 [α Cygni] 817 [α Cygni] 817 [α Cygni] 818 [α Cygni] 819 [α Cygni] 810 [α Cygni] 811 [α Cygni] 812 [α Cygni] 813 [α Cygni] 814 [α Cygni] 815 [α Cygni] 816 [α Cygni] 817 [α Cygni] 817 [α Cygni] 818 [α Cygni] 819 [α Cygni] 810 [α Cygni] 811 [α Cygni] 812 [α Cygni] 813 [α Cygni] 814 [α Cygni] 815 [α Cygni] 816 [α Cygni] 817 [α Cygni] 817 [α Cygni] 818 [α Cygni] 819 [α Cygni] 810 [α Cygni] 811 [α Cygni] 812 [α Cygni] 813 [α Cygni] 814 [α Cygni] 815 [α Cygni] 815 [α Cygni] 816 [α Cygni] 817 [α Cygni] 817 [α Cygni] 818 [α Cygni] 819 [α Cygni] 810 [α Cygni] 811 [α Cygni] 811 [α Cygni] 812 [α Cygni] 813 [α Cygni] 814	801	[4 Pise, austr.]	1.8	2.1	12	" # 20 027	+2 6147		25	_ 32	22	12.02	+14.000		26
803 α Cephei 804 I Pegasi 805 γ Pavonis 806 ζ Capricorni 807 [g Organi] 808 β Aquarii 809 β Cephei 810 ν Octantis 811 γ4 Cygni 812 [γ Capricorni] 813 [13 H. Cephei] 814 [2 I 3 3 2 7 63 4 2 4 2 1 2 4 2 1 3 3 4 7 6 3 4 4 1 1 3 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 3 4 2 1 4 2 1 3 4 2 1 4 2 1 3 4 2 1 4 2 1 3 4 2 1 4 2 1 3 4 2 1 4 2 1 3 4 2 1 4 2 1 3 4 2 1 4 2 1 3 4 2 1 4 2 1 3 3 4 1 4 1 4 1 4 1 4 4 4 4 4 4 4 4 4															14
804 I Pegasi		4													49
806	804				_					+19	25	54.16	+15.307	+	61
808 β Aquarii 2.9 21 26 14.277 -2.2124 48 +46 9 23.44 +15.804 + 103 808 β Aquarii 2.9 21 26 58.799 +3.1600 + 11 -5 57 15.94 +15.737 -5 58 15.94 +15.737 -5 58 15.94 +15.737 -5 58 15.94 +15.737 -5 58 15.94 +15.737 -5 58 17 4 Cygni 3.6 21 33 27.634 +2.4026 -3 4	805	γ Pavonis	4.2	21	19	15.804	+5.0010	+	133	-65	45	38.25	+16.103	+	788
808 β Λαμαπί 29,9 126 58.799 +3.1600 + 11 -5 57 15.94 +15.737 - 5 5	806	ζ Capricorni	3.8	21	21	42.154	+3.4301	_	I	22	47	19.54	+15.474	+	23
8co β Cephei 810 v Octantis 3.7 21 27 32.559 +0.7861 + 20 +70 10 43.13 +115.779 + 7 256	807														103
810 v Octantis 811 74 Cygni 812 [γ Capricorni] 813 [13 II. Cephei] 814 [1 Pisc.austr.] 815 ε Pegasi 816 [α Pogasi] 816 [α Pogasi] 817 (Cygni) 817 [α Cygni] 818 [α Capricorni] 819 δ Capricorni] 810 δ Capricorni] 811 (α Pogasi) 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 ε Pegasi 816 [α Pogasi] 817 (α Pisc.austr.] 818 [α Pogasi] 819 δ Capricorni] 810 δ Capricorni] 811 (α Pogasi) 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 [α Pogasi] 816 [α Pogasi] 817 (α Pisc.austr.] 818 [α Pogasi] 819 δ Capricorni] 819 δ Capricorni] 810 δ Capricorni] 811 (α Pisc.austr.] 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 [α Pogasi] 816 [α Pogasi] 817 (α Pisc.austr.] 818 [α Pisc.austr.] 819 δ Capricorni] 810 δ Capricorni] 811 (α Pisc.austr.] 811 (α Pisc.austr.) 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 [α Pisc.austr.] 816 [α Pisc.austr.] 817 [α Pisc.austr.] 818 [α Pisc.austr.] 819 δ (α Pisc.austr.] 810 [α Pisc.austr.] 811 (α Pisc.austr.) 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 [α Pisc.austr.] 816 [α Pisc.austr.] 817 [α Pisc.austr.] 818 [α Pisc.austr.] 819 δ (α Pisc.austr.) 810 [α Pisc.austr.] 810 [α Pisc.austr.] 811 (α Pisc.austr.) 811 (α Pisc.austr.) 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 [α Pisc.austr.] 815 [α Pisc.austr.] 816 [α Pisc.austr.] 817 [α Pisc.austr.] 818 [α Pisc.austr.] 819 [α Pisc.austr.] 810 [α Pisc.austr.] 810 [α Pisc.austr.] 811 [α Pisc.austr.] 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 [α Pisc.austr.] 815 [α Pisc.austr.] 816 [α Pisc.austr.] 817 [α Pisc.austr.] 818 [α Pisc.austr.] 819 [α Pisc.austr.] 810 [α Pisc.austr.] 810 [α Pisc.austr.] 811 [α Pisc.austr.] 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 [α Pisc.austr.] 815 [α Pisc.austr.] 816 [α Pisc.austr.] 817 [α Pisc.austr.] 818 [α Pisc.austr.] 819 [α Pisc.austr.] 810 [α Pisc.austr.] 810 [α Pisc.austr.] 811 [α Pisc.austr.] 812 [α Pisc.austr.] 813 [α Pisc.austr.] 814 [α Pisc.austr.] 815 [α Pisc.aust	808	β Aquarii	2.9	21	2 6	58.799	+3.1600	+							5
811	-		3.1											+	7
812 [γ Capricorni] 3.6 21 35 16.372 +3.3277 + 131 -17 3 20.71 +16.164 - 16 813 [13 II. Cephei] 6.1 21 36 15.658 +1.8612 + 7 +57 5 43.03 +16.233 + 2 814 [ε Pisc.austr.] 4.4 21 39 46.059 +3.5810 + 18 -33 25 23.56 +16.320 - 89 815 ε Pegasi 2.3 21 39 54.777 +2.9464 + 18 + 9 28 32.19 +16.416 0 817 [II Cephei] 4.8 21 40 39.086 +0.8901 + 233 +70 54 38.41 +16.551 + 98 816 [κ Pegasi] 4.1 21 40 42.274 +2.7152 + 25 +25 14 40.82 +16.465 + 10 818 [λ Capricorni] 5.5 21 41 51.221 +3.2324 + 20 -11 46 3.45 +16.590 - 4 820 [ο Juli] 5.6 21 43 26.605 +5.1283 - 87 -70 2 5.80 +16.571 - 21 821 π² Cygni 4.3 21 43 34.670 +2.2142 + 8 +48 54 23.63 +16.594 - 4 822 γ Giruis 3.0 21 48 39.857 +3.6418 + 77 -37 46 28.37 +16.825 - 18 823 [6 Pegasi] 5.5 21 49 6.159 +2.7282 + 4 +25 30 55.32 +16.865 + 1 824 [δ Judi] 4.9 21 56 42.823 +4.6140 +4.812 -57 8 38.53 +14.630 -25.85 826 [20 Pegasi] 5.8 21 56 51.018 +2.9219 + 36 +12 42 9.72 +17.411 - 7 828 α Αημανίί 4.2 22 1 18.962 +3.0821 + 10 - 0 44 34.57 +17.411 - 7 828 α Gruis 1.8 22 2 2 17.798 +1.8216 + 22 +66 2 21 39.28 +17.523 + 60 829 α Gruis 1.8 22 2 2 57.585 +2.7910 + 219 +24 55 11.08 +17.510 + 22 831 [α Pegasi] 3.9 22 2 57.585 +2.7910 + 219 +24 55 11.08 +17.510 + 22 832 [μ Pisc.austr.] 4.6 22 3 18.591 +3.5064 + 41 -33 24 48.59 +17.462 - 41 833 [27 Pegasi] 5.8 22 5 22.265 +2.6562 - 42 +32 44 48.96 +17.525 - 65 834 θ Pegasi 7.9 25 48.683 +3.0264 + 184 +5 46 9.87 +17.462 - 41 833 [27 Pegasi] 5.8 22 5 22.265 +2.6562 - 42 +32 44 48.96 +17.525 - 65 834 θ Pegasi 7.9 25 48.683 +3.0264 + 184 +5 46 9.87 +17.462 - 41 835 [27 Pegasi] 5.8 22 5 22.265 +2.6562 - 42 +32 44 48.96 +17.525 - 65 834 θ Pegasi 7.9 25 48.683 +3.0264 + 184 +5 46 9.87 +17.462 - 41 835 [27 Pegasi] 5.8 22 5 22.265 +2.6562 - 42 +32 44 48.96 +17.525 - 65 834 θ Pegasi 7.9 25 48.683 +3.0264 + 184 +5 46 9.87 +17.462 - 41 835 [27 Pegasi] 5.8 22 6 7.319 +2.6619 - 9 +32 45 3.34 +17.663 - 19 836 [27 Pegasi] 5.8 22 7 50.029 +2.0774 + 14 +57 46 19.46 +17.698 + 6 837 24 Cephei 4.8 22 8 8.264 +1.1592 + 54 +71 54 44.92 +17.713 + 8 838 [λ Pisc.austr.] 5	810	v Octantis	3.7	21	31	50.470	+-6.8017	-+-	131	77	46	37.94	+15.745		2 56
813 [I3 II. Cephei] 6.1 21 36 15.658 +1.8612 + 7 +57 5 43.03 +16.233 + 2 17	811	74 Cygni	5.1	21	33	27.634	+2.4026		3	+40	1	20.10	+16.097	+	12
814 [t Pisc.austr.] 4.4 21 39 46.059 + 3.5810 + 18 - 33 25 23.56 + 16.320 - 89 815 ε Pegasi 2.3 21 39 54.777 + 2.9464 + 18 + 9 28 32.19 + 16.416				21	35	16.372	+3.3277	+	131	-17					16
815 ε Pegasi	- 1													-+-	2
817 [II Cephei]														-	-
816 [z Pegasi]	815	ε Pegasi	2.3	21	39	54.777	+2.9464	+-	18	+ 9	28	32.19	+16.416		0
818 [λ Capricorni] 5.5 21 41 51.221 +3.2324 + 20 -11 46 3.45 +16.509 - 4 819 δ Capricorni 2.8 21 42 14.445 +3.3146 + 178 -16 31 21.28 +16.238 - 294 820 π² Cygni 7 Gruis 3.0 21 48 39.857 +3.6418 + 77 -37 46 28.37 +16.825 - 18 821 π² Cygni 3.0 21 48 39.857 +3.6418 + 77 -37 46 28.37 +16.825 - 18 822 16 Pegasi 5.2 21 49 6.159 +2.7282 + 4 +25 30 55.32 +16.865 + 18 823 16 Pegasi 5.2 21 49 6.159 +2.7282 + 4 +25 30 55.32 +16.865 + 18 824 [ε Jndi] 4.6 21 52 0.241 +4.1036 + 4812 -57 8 38.53 +14.630 -2585 826 [20 Pegasi 5.8 21 56 51.018 +2.9219 + 36 +12 42 9.72 +17.167 - 54 827 α Aquarii 2.9 22 1 18.962 +3.0821 + 10 - 0 44 34.57 +17.411 - 7 828 α Gruis 1.8 22 2 2 2 2 2 2 2 2	817		4.8	21	40	39.086	+0.8901	+							98
819 δ Capricorni [o Jndi]					-									+	10
820 [6] Judi] 5.6 21 43 26.605 +5.1283 -87 -70 2 5.80 +16.571 -21 821 π^2 (Lygni											-	0 .)			4
821 π^2 (Lygni											-				294
822 γ (fruis	820	[o Judi]	5.6	21	43	26.605	+5.1283					-		_	21
823		π² Cygni												_	4
824 [5 Jndi]														-	18
825 [ϵ Jndi] 4.9 21 56 42.823 +4.6140 +4812 -57 8 38.53 +14.630 -1585 826 [20 Pegasi] 5.8 21 56 51.018 +2.9219 + 36 +12 42 9.72 +17.167 - 54 828 Aquarii 20 Cephei 5.7 22 2 21.798 +1.8216 + 22 +62 21 39.28 +17.523 + 60 829 α Gruis 1.8 22 2 45.324 +3.7955 + 119 +24 55 11.08 +17.510 + 22 831 [ϵ Pegasi] 3.9 22 2 57.585 +2.7910 + 219 +24 55 11.08 +17.510 + 22 833 [27 Pegasi] 5.8 22 5 22.265 +2.6562 - 42 +32 44 48.96 +17.525 - 65 837 Pegasi 4.3 22 6 7.319 +2.6619 - 9 +32 45 3.34 +17.698 + 6 837 24 Cephei (A Pisc.austr.) 838 (E Cephei (A Pisc.austr.)) 839 (E Cetantis) 5.4 22 9 23.072 +2.0774 + 14 +57 46 19.46 +17.698 + 6 837 [ϵ Cephei (A Pisc.austr.)) 839 (E Cetantis) 5.4 22 9 23.072 +3.4068 + 16 -28 11 54.81 +17.755 - 1 839 (E Cetantis) 5.3 22 10 19.694 +6.9168 + 138 -80 52 24.38 +17.754 - 40										_				+	τ
826 [20 Pegasi] 5.8 21 56 51.018 +2.9219 + 36 +12 42 9.72 +17.167 - 54 54 54 54 54 54 54		_			-										
827	825	[s andi]							- 1						505
828				ı											54
830 20 Cephei 829 a Gruis 5.7 22 2 21.798 +1.8216 + 22 +62 21 39.28 +17.523 + 60 829 a Gruis 1.8 22 2 45.324 +3.7955 + 119 -47 22 58.48 +17.308 - 171 831 [a Pegasi] 3.9 22 2 57.585 +2.7910 + 219 +24 55 11.08 +17.510 + 22 833 [27 Pegasi] 5.8 22 5 22.265 +2.6562 - 42 +32 44 48.96 +17.525 - 65 834 \$\frac{3}{2}\$ Pegasi 3.6 22 5 48.683 +3.0264 + 184 + 5 46 9.87 +17.639 + 31 835 \$\frac{7}{2}\$ Pegasi 4.3 22 6 7.319 +2.6619 - 9 +32 45 3.34 +17.603 - 19 836 \$\frac{7}{2}\$ Cephei 3.4 22 7 50.029 +2.0774 + 14 +57 46 19.46 +17.698 + 6 837 24 Cephei 838 [\hat{3}\$ Pisc.austr.] 82 8 8.264 +1.1592 + 54 +71 54 44.92 +17.713 + 8 836 [\hat{2}\$ Cetantis] 5.3 22 10 19.694 +6.9168 + 138 -80 52 24.38 +17.754 - 40		_				- 1	-							_	,
829 α Gruis														_	
83I [Pegasi] 3.9 22 2 57.585 $+2.7910 + 219 +24 55 $ II.08 $+17.510 + 22 $ 833 [27 Pegasi] 5.8 22 5 22.265 $+2.6562 + 41 $ 32 24 48.59 $+17.462 + 41 $ 833 [27 Pegasi] 5.8 22 5 22.265 $+2.6562 + 42 $ 42 44 48.96 $+17.525 + 65 $ 836 $+17.639 + 17.639 $ 43 22 6 7.319 $+2.6619 + 9 $ 45 3.4 $+17.698 + 17.698 $ 47 48.86 $+17.698 + 17.698 $ 48.87 24 Cephei 3.4 22 7 50.029 $+2.0774 + 14 + 57 $ 46 19.46 $+17.698 + 68 $ 837 24 Cephei 3.4 22 8 8.264 $+1.1592 + 54 $ 47 54 44.92 $+17.713 + 8 $ 838 [\$\text{Pisc.austr.}\$] 5.4 22 9 23.072 $+3.4068 + 16 -28 $ II 54.81 $+17.755 -18 $ 18.89 [\$\text{Cotantis}\$] 5.3 22 10 19.694 $+6.9168 + 138 -80 $ 52 24.38 $+17.754 -40 $															
832 [μ Pisc.austr.] 4.6 22 3 18.591 +3.5064 + 41 -33 24 48.59 +17.462 - 41 833 [27 Pegasi] 5.8 22 5 22.265 +2.6562 - 42 +32 44 48.96 +17.525 - 65 65 834 # Pegasi 7 Pegasi 4.3 22 6 7.319 +2.6619 - 9 +32 45 3.34 +17.603 - 19 836 \$\zeta\$ Gephei 3.4 22 7 50.029 +2.0774 + 14 +57 46 19.46 +17.698 + 6 837 24 Cephei 4.8 22 8 8.264 +1.1592 + 54 +71 54 44.92 +17.713 + 8 838 [\$\lambda\$ Pisc.austr.] 5.4 22 9 23.072 +3.4068 + 16 -28 11 54.81 +17.755 - 18 15 15 15 15 15 15 15				24					- 1			- 1	, ,		17/1
833 [27 Pegasi] 5.8 22 5 22.265 $+2.6562 - 42 + 32$ 44 48.96 $+17.525 - 65$ 834 $\frac{1}{2}$ Pegasi 3.6 22 5 48.683 $+3.0264 + 184 + 5$ 46 9.87 $+17.639 + 31$ 835 π Pegasi 4.3 22 6 7.319 $+2.6619 - 9 + 32$ 45 3.34 $+17.603 - 19$ 836 ζ Cephei 3.4 22 7 50.029 $+2.0774 + 14 + 57$ 46 19.46 $+17.698 + 6$ 837 24 Cephei 4.8 22 8 8.264 $+1.1592 + 54 + 71$ 54 44.92 $+17.713 + 8$ 838 [λ Pisc.austr.] 5.4 22 9 23.072 $+3.4068 + 16 -28$ 11 54.81 $+17.755 - 1$ 839 [ϵ Octantis] 5.3 22 10 19.694 $+6.9168 + 138 -80$ 52 24.38 $+17.754 - 40$	-		0 /												
834	~ _											0 1		_	
835 π Pegasi 4.3 22 6 7.319 +2.6619 - 9 +32 45 3.34 +17.603 - 19 836 ζ Cephei 3.4 22 7 50.029 +2.0774 + 14 +57 46 19.46 +17.698 + 6 837 24 Cephei 4.8 22 8 8.264 +1.1592 + 54 +71 54 44.92 +17.713 + 8 838 [\$\lapha\$ Pisc.austr.] 5.4 22 9 23.072 +3.4068 + 16 -28 11 54.81 +17.755 - 1 5.3 22 10 19.694 +6.9168 + 138 -80 52 24.38 +17.754 - 40														_	
836 ζ (Tephei 3.4 22 7 50.029 $+2.0774$ $+$ 14 $+57$ 46 19.46 $+17.698$ $+$ 6 837 24 Cephei 4.8 22 8 8.264 $+1.1592$ $+$ 54 $+71$ 54 44.92 $+17.713$ $+$ 8 838 [λ Pisc.austr.] 5.4 22 9 23.072 $+3.4068$ $+$ 16 -28 11 54.81 $+17.755$ $-$ 1 5.3 22 10 19.694 $+6.9168$ $+$ 138 -80 52 24.38 $+17.754$ $-$ 40					-										
837 24 Cephei 4.8 22 8 8.264 +1.1592 + 54 +71 54 44.92 +17.713 + 8 838 [λ Pisc.austr.] 5.4 22 9 23.072 +3.4068 + 16 -28 11 54.81 +17.755 - 1 839 [ϵ Octantis] 5.3 22 10 19.694 +6.9168 + 138 -80 52 24.38 +17.754 - 40															
838 [λ Pisc.austr.] 5.4 22 9 23.072 +3.4068 + 16 -28 11 54.81 +17.755 - 1 839 [ϵ Octantis] 5.3 22 10 19.694 +6.9168 + 138 -80 52 24.38 +17.754 - 40															
839 [e ()etantis] 5.3 22 10 19.694 +6.9168 + 138 -80 52 24.38 +17.754 - 40															

Nr.	N a m e	Gr.	٨١	₹. 1	913.0	Jährl. Verände- rung	Eig bev Ein ve	hrl. gen- v. in nh. on	Dekl	. 19	913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
841	α Tucanae	2.8	22	12"	33.073	+4.1385	_	98	_60°	4.1	37.39	+17.834	- 49
842	γ Aquarii	3.7				+3.0994						+18.068	
	[31 Pegasi]					+2.9518						+18.073	
844	3 Lacertae	4.5		-		+2.3545						+17.982	
845	[v Gruis]	5.6	22	23		+3.5261		24				+18.135	
846	[81 Gruis]	4.0	22	2/1	4.438	+3.5977		17	12	56	25.58	+-18.307	- 8
847	[o Cephei]	•				+2.2220						18.383	
848	7 Lacertae					+2.4667						+18.459	
849	[v Aquarii]					+3.2861						+18.374	
850	η Aquarii	3.9				+3.0835		59				+18.494	
851	[31 Cephei]	5.2	22	22	27 772	± 1 4826					-	+18.662	1
852	10 Lacertae	_				+2.6879						+18.688	
_	[30 Cephei]	5.3				+2.1227			+63			+18.679	
854	[& Pisc.austr.]					+3.3235						+18.712	
855	ζ Pegasi	3.3	22			+2.9913						+18.737	
		5 5	1								_		
856	β Gruis											+18.735	
857	η Pegasi [13 Lacertae]					-+2.8090						+18.772 +18.848	
859	λ Pegasi					+2.8871						+18.896	
860	ε Gruis	3.5				+3.6395		97				+18.861	
				_					_				
861	[τ Aquarii]	4.0				+3.1789			-14			+18.949	
862	[µ Pegasi]											+18.964	
863	t Cephei			_								-+18.903	
864	λ Aquarii		22									+19.105	
865	p.Indi	6.3		40		+4.2214						+19.144	
866				-		+3.1866						+19.100	- 19
867		1.2	22			+3.3209				5		+19.032	
868		4.0				+3.5592						+19.248	
869		3.5				+2.7546						+19.302	
870	β Pegasi	2.4	22	59	33.279	+2.9049	+	145	+27	36	38.29	+19.490	+137
871	α Pegasi	2.4	23	0	25.559	+2.9864	+	41	+14	44	12.86	+19.331	- 41
872		4.2	23									+19.369	
873		3.7	23									+19.50	
874			23									+19.448	
875	Br. 3077	5.8	23	9	5.307	+2.8772	+	2526	+-56	41	16.10	+19.848	+295
876	[Tucanae 25 G.]	5.9	23	11	44.264	1-3.6318	3-+-	232	-62	28	32.70	+19.550	- 53
877												+19.690	
878												+19.63	
879	γ Sculptoris											+19.57	
880	τ Pegasi											5-19.67	

Хr.	N a m e	Gr.	AR.	1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von	Dekl	. 1913.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".∞1
882 881	4 Cassiopejae [v Pegasi]								+19.745 +19.792	
883 884	[o Gruis] z Piscium	5.7	23 2	44.647	+3.3690	- 4	-53	12 12.12	2+19.886 2+19.685	+119
885	70 Pegasi	4.7	23 24	45.210	+3.0318	+ 38	+12	16 49.40	+19.837	+ 28
	[3 Sculptoris] [72 Pegasi] [Aquarii 248 G.]	5.2		38.052		+ 40	+30	50 42.08	8 +19.869 8 +19.858 8 +19.909	- 12
890	{Phoenicis 11G.] [λ Androm.]			10.171	+3.2388 +2.9274	+ 47			+19.871 +19.487	
891 892 893 894 895	t Androm. t Piscium γ Cephei ω² Aquarii 41 II. Cephei	4.I 3.3 4.5	23 35 23 35 23 38	28.483 46.034 12.706	+3.0844 +2.4362 +3.1131	+247 -182 $+65$	+ 5 +77 -15	9 16.48 8 48.33 1 33.73	+19.911 +19.491 +20.091 +19.893 +19.996	440 +-157 63
898 899	Lac. 3 Scalpt. [Aquarii 268 G.] 9 Pegasi [9 Cassiopejae] [27 Piscium]	6.3 5.4 4.8	23 45 23 48 23 50	45·379 3·593 1.817	+3.1293 +3.0965 +3.0483 +2.9823 +3.0712	$+86 \\ -8 \\ -7$	10 : -+18 :	27 35.31 38 13.33 0 55.22	+19.979	-105 + 86 - 39 + 4 - 68
901 902 903 904 905	[π Phoenicis] ω Piscium ε Tucanae [θ Octantis] [2 Ceti]	3.9 4.5 5.0	23 54 23 55 23 57	50.565 24.123 8.216	+3.1394	+ 100 + 64 220	+63 -66 -773	22 53.88 3 40.24 32 45.70	+20.086 +19.931 +20.009 +19.874 +-20.042	+ 46 - 109 - 33 - 171 - 4

1) Ort des Schwerpunktes. Die Reduktion auf den Hauptstern ist (Peters, Neuer Fundamental-Katalog, Seite 98):

1913.0:
$$\Delta a = -0^{8}.223$$
 $\Delta b = -0^{8}.52$
1914.0: $= -0.227$ $= -0.66$.

- 2) A. R. der Mitte, Deklination des folgenden helleren Sterns.
- 7) Ort des Schwerpunkts. Die Reduktion auf den Ort des helleren Sterns beträgt (Poters, Neuer Fundamental-Katalog, Seite 98):

1913.0:
$$\Delta \alpha = -0^{8}.048$$
 $\Delta \delta = -0^{4}.57$
1914.0: $= -0.053$ $= -0.47$.

⁴) Schwerpunkt des Systems. Abstände vom Schwerpunkt (Peters, Neuer Fundamental-Katalog, Seite 99):

heller Stern 1913.0:
$$\Delta \alpha$$
 +0*.686 $\Delta \delta$ +7'.00
1914.0: +0.678 +6.76
Begleiter 1913.0: $\Delta \alpha$ -0*.808 $\Delta \delta$ -8''.22
1914.0: -0.798 -7.94.

Von den Sternen, deren Namen eingeklammert sind, folgen keine Ephemeriden.

N a m e	Gr.	AR. 1913.0	Jährl. Verände- rung	Jährl. Eigen- bewe- gung o ⁸ .	Dekl. 1913.0	Jährl. Verände- rung	Jährl. Eigen- bewe- gung o".
---------	-----	------------	----------------------------	---	--------------	----------------------------	--

Nördliche Polsterne.

$egin{array}{c} Nb \ Nc \ Nd \end{array}$	43 H. Cepheiα Ursae min.Gr. 75051 H. Cephei1 H. Dracon.	2.0 6.8 5.2	1 28 4 8 7 C	19.015 52.286 7.484	+28.0532 $+17.5487$ $+29.2961$	+1412 +0158 -0502	+88 +85 +87	50 19 11	29.26 32·42 15.72	+18.578 +9.376 -5.235	+02 +033 -036
Nf Ng Nh Ni	[30 H. Camel.] E Ursae min.	5.2 4.2 4.3 6.8	10 20 16 54 18 0	34.3 ⁸ 4 50.557 19.313 26.332	+ 7.6022 - 6.2624 -19.4990 -71.1107	-0469 +0075 +0172 -0934	+83 +82 +86 +89	0 10 36 0	-7.4° 55.52 51.29 39.8°	-18.158 -5.617 $+0.085$ $+5.823$	+031 +006 +057 +009

Südliche Polsterne.

								1				
Sa	Octantis 4 G.	6	I	42	17.76	- 3.792	+018	—85°	12	33.74	+18.116	+035
Sb	[\$ Mensae]	6.0	5	8	44.15	— 6. 9 48	004	-82	35	17.57	+ 4.460	+014
Sc						- 8.066						
Sd		6-5	12	45	43.51	+ 5.943	+042	-84	39	3.96	-19.623	+025
Se	Octantis 20 G.	7	14	44	26.70	-1-25.735	-181	87	47	49.77	-15.169	- 066
Sf	Octantis 26 G.											
Sg	χ Octantis					+35.743						
Sh	σ Octantis	6	19	21	19.69	+96.745	+114	-89	13	57.47	+6.964	002
Si	β Octantis					+6.339						
-8k	τOctantis	6	23	15	28.02	+10.340	+021	-87	57	37.12	-1-19.684	+015

701	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	43	Hev. (Cephei 4ª	·.3.	α U1	sae m	inoris 2"	.0.	Gı	75	o 6 ^m .8.	
191	3	AR.	C Gl.	DekI.	Œ Gl.	AR.	Œ Gl.	Dekl.	∝ Gl.	AR.	Œ Gl.	Dekl.	GI.
		oh 56m	in 8 0.01	+85°47′	in or	1 27 m	in e 0.01	+88° 50'	in o.or	4 ^h 8 ^m	in s c.oI	+85° 19'	in 0.01
Jan.	0	32.79	-7	48.98	0	67.22	—2 6	51.65	+ 1	61.79	-5	51.70	+ 5
	1	32.51	5	49.07	— <u>3</u>	66.21	20	51.79	- 2	61.68	5	51.99	+ 2
	2	32.23	-2	49.15	- 5	65.20	— 1 0	51.92	4	61.57	-4	52.28	- 2
	3	31.95	- - I	49.22	- 6	64.18	+ 3	52.04	6	61.46	-2	52.56	- 5
	4	31.66	+5	49.29	- 5	63.16	+15	52.16	- 5	61.34	+1	52.84	- 7
		31.38	+7	49.35	- 2	62.13	+2 5	52.27	- 3	61.21	+3	53.12	- 7
	6	31.09	+8	49.40	+ 1	61.10	+30	52.37	0	61.08	+6		- 6
	7	30.81	+8	49.45	+ 4	60.06	+30	52.47	+ 3	60.95	+7	53.66	<u> </u>
	8	30.52	+6	49.49	+ 7	59.02	+23	52.56	+ 6	60.81	+7	53.92	C
	9	30.24	+2	49.52	+ 8	57.98	+12	52.65	+ 8	60.67	+6	54.18	+ 4
	10	29.95	I	49.55	+ 8	56.93	— І	52.73	+ 8	60.52	+4	54.44	+ 7
	ΙI	29.67	-5	49.57	+ 6	55.87	-15	52.80	+ 7	60.37	0	54.69	+8
	12	29.38	-7	49.58	+ 3	54.81	-25	52.86	+ 4	60.22	-3	54.94	+8
	13	29.10	8	49.58	I	53.75	-30	52.92	0	60.06	-6	55.18	+ 6
	14	28.81	8	49.58	- 5	52.69	30	52.97	— 4	59.90	-8	55.42	+ 2
	15	28.52	5	49.58	- 9	51.63	-24	53.02	_ 8	59.73	-8	55.66	- 2
	16	28.23	2	49.57	-10	50.57	-13	53.06	-10	59.56	-7	55.89	- 5
	17	27.94	+1	49.55	II	49.50	0	53.09	-11	59.39	-5	56.12	– 8
	18	27.66	+5	49.53	— 9	48.43	+12	53.12	- 9	59.21	-2	56.34	-10
	19	27.37	+7	49.50	6	47.36	+22	53.14	- 7	59.03	+1	56.55	- 9
	20	27.09	+7	49.46	- 2	46.30	+26	53.15	- 3	58.84	+4		- 7
	21	26.80	+7	49.41	+ 2	45.23	+25	53.15	+ I	58.65	+5		- 3
	22	26.52	+4	49.36	+ 5	44.17	+18	53.15	+ 5	58.46	+6	57.16	+ 1
	23	26.24	+1	49.30	+ 8	43.10	+ 7	53.14	+ 7	58.27	+5	57.36	5
	24	25.96	-2	49.24	+ 8	42.04	- 5	53.13	+ 8	58.07	+3	57.55	8
	25	25.68	-5	49.17	+ 7	40.98	1 6	53.11	+ 7	57.87	0	57.74	+ 9
	26	25.41	-7	49.09	+ 4	39.93	-24	53.08	+ 5	57.66	-2	1 21/	+ 9
	27	25.13	-7	49.01	+ r	38.87	26	53.05	+ 2	57.45	-4	58.09	+ 7
	28	24.86	-6	48.92	— 2	37.82	23	53.01	_ I	57.24	-5		+ 3
	29	24.59	-4	48.82	- 4	36.77	-15	52.96	- 4	57.03	-5	58.42	(
	30	24.32	0	48.72	— 5	35.73	- 3	52.91	- 5	56.81	3		2
	31	24.05	+3	48.61	— 5	34.69	+10	52.85	- 6	56.60	C	58.73	- 6
Febr	. I	23.79	+6	48.50	- 3	33.66	+22	52.78	- 4	56.38	+-2	58.87	
	2	23.53	+8	48.38	0	32.63			— I	56.16	+5	59.01	- :
	3	23.27	+-8	48.26	+ 3	31.61			+ 2	55.93	+7	59.14	- 4
	4	23.01	+-7	48.13	+ 6	30.60	+-27	52.54	+ 5	55.70	+8	59.27	- :
	5	22.75	+4	1	+ 8	29.59			+ 7	55.47			+ 3
	6	22.49	0	11	+ 8	28.59			+ 8	55.24	+5	11	+ 6
sec 5,	to δ	+1	3. 64	+1;	2.6т	- L -A1	9.72	-1-49).7T	- -12	.20	 - 12	2.25

		511	Jev. C	ephei 5 ^m .	2.	1 He	ev. Dr	aconis 4	·3·	εUrs	ae mi	noris 4 ^m .	2.
1913		AR.	Œ Gl.	Dekl.	∝ Gl.	AR.	Gl.	Dekl.	Œ Gl.	AR.	Cil.	Dekl.	∝ Gl.
		7 ^h 0 ^m	in 0.01	+87° 11′	iu 0.01	9 ^h 24 ^m	in s 0.01	+81°42′	in 0.01	16 ^h 54 ^m	in 0.01	+82° 10'	in
Jan.	0	37.04	+ 1	21.97	+7	56.23	+2	36.33	+ 7	42.93	+2	38.53	5
	1	37.19	- 3	22.28	+6	56.37	0	36.51	+ 6	42.98	+3	38.19	- I
	2	37.33	6	22.60	+3	56.50	2	36.69	+ 4	43.04	+2	37.85	+3
	3	37.46	- 8	22.91	1—	56.63	-3	36.88	+ 1	43.10	+1	37.51	+6
	4	37.58	8	23.23	-5	56.76	-3	37.08	- 3	43.16	0	37.17	+-8
	5	37.69	- 5	23.54	-8	56.89	3	37.28	_ 6	43.23	2	36.84	-⊢8
	6	37.79	- 1	23.86	9	57.02	2	37.48	- 9	43.30	3	36.51	+6
	7	37.88	+ 3	24.18	9	57.14	0	37.69	- 9	43.37	4	36.18	+2
	8	37.97	+ 7	24.50	-7	57.26	+1	37.90	8	43.44	4	35.86	C
	9	38.05	+10	24.82	-4	57.38	+3	38.11	6	43.52	-3	35.54	4
1	10	38.12	+11	25.14	0	57.49	-+-4	38.33	2	43.60	2	35.22	7
1	11	38.18	+ 9	25.46	+4	57.60	+4	38.55	+ 2	43.68	0	34.91	8
]	12	38.22	+ 5	25.79	+8	57.71	+-3	38.78	+ 6	43.77	+2	34.60	8
]	13	38.26	0	26.11	-+-9	57.82	+2	39.01	+ 9	43.86	+4	34.30	
3	[4	38.29	5	26.43	+9	57.93	0	39.25	+10	43.95	+5	34.00	2
11 3	r5	38.31	-10	26.75	+-8	58.03	2	39.49	+10	44.04	+5	33.70	- <u>+</u> 2
3	ι6	38.32	-13	27.07	+4	58.13	-4	39.73	+ 7	44.13	4	33.41	+5
]	17	38.32	-14	27.39	1	58.23	4	39.98	+ 4	44.23	+3	33.12	+-8
3	ι8	38.32	-13	27.71	-3	58.32	-5	40.23	0	44-33	+1	32.83	+9
1	19	38.30	- 9	28.03	6	58.42	4	40.48	- 4	44.43	I	32.55	+-9
2	20	38.28	- 4	28.35	-8	58.51	2	40.73	- 6	44.54	2	32.28	+6
2	21	38.25	+ 2	28.67	-7	58.60	$-\mathbf{r}$	40.99	- 7	44.65	-3	32.01	4-3
2	22	38.21	+ 7	28.98	- 5	58.68	- -I	41.25	7	44.76	-3	31.74	J
2	23	38.16	+10	29.30	2	58.76	3	41.52	— 5	44.87	-3	31.48	5
2	44	38.10	+12	29.61	+1	58.84	+4	41.79	2	44.99	-2	31.22	8
2	25	38.03	11	29.92	+-5	58.91	-1-4	42.06	+ 2	45.11	0	30.97	9
2	26	37.95	+ 8	30.23	+7	58.98	+4	42.33	5	45.23	I	30.72	8
2	27	37.86	+ 4	30.54	+8	59.05	-1-2	42.61	+ 6	45.35	+2	30.48	6
2	28	37.77	- I	30.84	+7	59.12	- -1	42.89	- ⊢ 7	45.47	3	30.24	-3
2	29	37.67	- 5	31.15	+4	59.18	I	43.17	+ 5	45.59	-1-3	30.01	+1
3	30	37-55	- 7	31.45	1	59.24	2	43.45	-+- 2	45.72	- -2	29.78	5
3	31	37.43	- 8	31.75	-3	59.30	3	43.73	- I	45.85	0	29.56	-1-7
Febr.	1	37.30	6	32.05	7	59-35	-3	44.02	- 5	45.98	—I	29.34	+8
	2	37.16	- 3	32.35	-9	59.40	-2	44.31	8	46.11	3	29.13	+7
	3			32.64	9	59.45	-1	44.60	- 9	46.25	-4	28.93	-1-5
	4	36.87	+ 6	32.93	- 8	59.49	- -I	44.89	9	46.39	4	28.73	- - 1
	5	36.70	± 9	33.22	5	59.53	+2	45.18	7	46.53	-4	28.54	3
	6	36.53	+11	33.51	I	59.57	+3	45-47	- 4	46.67	-3	28.35	6
sec o, tg	õ	-1-2	0.41	- 20.	38	-+-6.	94	+6.	86	+7.	35	-1-7.2	8

		ð Urs	ae mi	noris 4 ^m	.3.	λ υ.	rsae m	inoris 6	^u .8.	76	Drac	onis 6 ^m	.0,
191	-3	AR.	∝ Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	∝ Gl.	Dekl.	Œ Gl.
		17 ^h 59 ^m	in s o.o1	+86° 36′	in 01	19 ^h 5 ^m	in s 0.01	+89°0′	in 0.01	20h 48m	in o.01	+82° 12′	in 0.01
Jan.	0	57.27	+ 4	39.31	<u>-6</u>	61.55	- 4	34.28	-8	46.19	-2	40.15	- 7
	I	57.27	+ 6	38.97	-2	61.14		33.96	6	46.08	0	39.90	7
	2	57.27	+ 6	38.63	+2,	60.75	+17	33.64	-3	45.98	+1	39.64	5
	3	57.29	+ 4	38.29	+5	60.38	+21	33.32	0	45.88	+2	39.38	- 2
	+	57.31	-⊢ r	37.95	+8	60.04	+20	32.99	+4	45.78	+3	39.11	+ 2,
	5	57.34	— 2	37.61	+9	{59.72 59.43	+ 12 + 1	32.67 32.34	+7 +9	45.69	+3	38.84	+ 5
	6	57.38	- 6	37.27	+-8	59.16	-12	32.02	+9	45.60	+2	38.57	+ 8
	7	57.43	- 9	36.93	+5	58.92	-23	31.69	+7	45.51	0	38.29	+ 9
	8	57.48	-10	36.59	+2	58.71	-30	31.36	+4	45.42	-1	38.01	+ 9
	9	57.54	- 9	36.25	2	58.52	-31	31.03	0	45.34	-3	37.73	+ 7
	10	57.61	— 6	35.92	-6	58.36	-27	30.70	-4	45.26	4	37.44	+ 3
	11	57.69	– 2	35.59	-8	58.22	16	30.37	-7	45.18	-4	37.15	I
	12	57.77	+ 2	35.26	<u>-9</u>	58.10	- I	30.04	-9	45.11	-3	36.86	- 5
	13	57.86	+ 7	34.93	-8	58.02	+15	29.71	-9	45.04	2	36.56	- 8
	14	57.95	+10	34.61	一 5	57.96	+29	29.38	-7	44.97	0	36.26	10
	15	58.05	+12	34.28	I	57.92	+39	29.05	-4	44.90	+2	35.96	-10
	16		+12	33.96	+3	57.91	+41	28.72	0	44.84	+4	35.66	— 8
	17	-	+ 9	33.64	+6	57.92		28.39	+4	44.78	+5	35.35	- 4
	18	58.40	+ 6	33.33	+-8		+27	28.06	+7	44.72	+5	35.04	0
	19	58.53	+ I	33.01	+9	58.03	+13	27.74	+8	44.66	+4	34.73	+ 3
	20	58.67	— 3	32.70	-+-7	58.12	- 3	27.41	+8	44.61	+3	34.41	-1 6
	21	58.82	- 7	32.39	+4	58.24	17	27.08	+6	44.56	+I	34.10	-H 7
	22	58.97	- 8	32.08	+1	58.38	28	26.76	+2	44.52	-1	33.78	+ 7
	23	59.13	8	31.78	-3	58.55	-32	26.44	I	44.48	-3	33.46	+ 5
	24	59.29	- 7	31.48	-7	58.74	-29	26.11	<u>-5</u>	44.44	-4	33.14	+ 2
	25	59.46	- 4	31.18	8	58.95	-21	25.79	-7	44.40	-4	32.82	- I
	26	59.63	0	30.89	-9	59.19	- 9	25.47	-8	44.37	-4	32.50	- 4
	27	1	+ 3	30.60	7	59.46	_	25.16	-7	44.34	-3	32.17	— 6
	28	60.00	+ 5	30.31	-4	59.75	+14	24.84	<u>-5</u>	44.31	I	31.84	- 7
	29	60.20	+ 6	30.03	0	60.06	+20	24.53	-r	44.28	+1+2	31.51	$-\frac{6}{3}$
	30	60.40	+ 5	29.75		60.40		24.22	+3	44.24	-1-3	30.85	0
	31		+ 3	29.47		60.76		23.91	+6				+ 4
Febr		60.82				61.15		23.60	+9	1			
	2	61.04				61.56		23.29	+9				
	3	61.26			+7	61.99	19	22.99	+-8	44.21	—ı	29.53	+10
	4	61.49		11	_	62.45		22.69	+-5	44.21		-	
	5	61.73						22.39	+2				-
	6	61.97	- 8	27.91	-4	63.43	30	22.10	-2	44.21	-4	28.54	+ I
sec ò, i	gò	-+-16.	.91	16.	88	-1-5	7.75	- I -57	·74	+-7	.38	+7.	31

1913 Febr. 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 März 1 2 3 4 5 6 7 8	431	Iev. (Cephei 4"	.3.	αUr	sae m	inoris 2ª	.o.	(3r. 79	50 6°°.8.	
1913	AR.	€ G1.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Gl.	AR.	Œ Gl.	Dekl.	≪ Gl.
	o ^h 56 ^m	in s 0.01	+85°47′	in 0.01	1 ^h 26 ⁿ	in s o.o.	+88° 50'	in ".0.01	4 ^h 8 ^m	in s 0.01	+85° 19′	in 0.01
Febr. 6	22.49	0	47.85	+ 8	88.59	+ 4	52.35	+ 8	55.24	+5	59.51	+ 0
7	22.24	-3	47.70	+ 7	87.59	-10	52.25	+ 8	55.00	+2	59.62	-1- 8
	21.99	6	47.55	+ 4	86.60	-21	52.14	+ 5	54.77	-2	59.72	8
9	21.75	8	47.39	0	85.63	-29	52.03	+ 2	54.53	5	59.82	+ ;
10	21.51	8	47.23	4	84.66	31	51.91	- 2	54.29	-7	59.91	+ -
11	21.27	6	47.06	- 7	83.70	-26	51.78	6	54.05	_8	60.00	
12	21.03	-4	46.88	_1o	82.75	18	51.64	- 9	53.81	8	60.08	- 4
13	20.80	0	46.70	-11	81.81	- 5	51.50	11	53.56	6	60.15	
	20.57	+3	46.51	-10	80.88	+ 8	51.36	10	53.32	-3	60.22	- 0
	20.35	+6	46.32	— 7	79.96	+18	51.21	– 8	53.07	0	60.28	-10
16	20.13	+7	46.12	- 4	79.05	+25	51.05	- 5	52.83	+3	60.33	8
	19.91	+7	45.92	0	78.16	+26	50.89	0	52.58	+5	60.38	_ 5
	19.69	+5	45.71	+ 4	77.27	+21	50.72	+ 3	52.33	+6	60.42	_ ī
19	19.48	+2	45.50	+ 7	76.40	+12	50.55	+6	52.08	+-5	60.46	+ 3
	19.27	I	45.29	+ 8	75.54	0	50.37	+ 8	51.83	+4	60.49	+ 6
21	19.07	-4	45.07	+ 7	74.69	12	50.19	+ 8	51.58	+1	60.51	+ 0
	18.87	-7	44.85	+ 5	73.86	-21	50.00	+ 6	51.33	I	60.52	+ 9
	18.68	_8	44.62	+ 2	73.04	—2 6	49.81	+ 4	51.08	-3	60.53	+ 7
-	18.49	-7	44.39	_ I	72.23	25	49.61	0	50.83	-5	60.53	+ 5
25	18.31	-5	44.15	- 4	71.44	-19	49.41	- 3	50.58	5	60.53	+ 3
26	18.13	—т	43.91	— 5	70.66	8	49.20	- 5	50.33	-4	60.52	3
27	17.95	+2	43.67	$-\overset{\circ}{5}$	1 2	+ 5	48.99	- 6	50.08	2	60.51	è
	17.78	+6	43.42	$-\frac{1}{4}$	69.15		48.77	— <u>5</u>	49.83	+I	60.49	
März 1	17.61	+8	43.17	i	68.41	+27	48.55	— 2	49.58	+4	60.46	_ ;
2	17.45	+8	42.92	+ 2	67.69	+31	48.32	+ I	49.33	+6	60.43	_ 5
3	17.29	+7	42.66	+ 5	66.99	+29	48.09	+ 4	49.08	+8	60.39	2
	17.14	+5	42.40	+ 7	66.30	+22	47.86	+ 7	48.83	+7	60.34	- - J
	16.99	+2	42.13	+ 9	65.63	+10	47.62	+ 8	48.59	+6	60.29	- - 4
	16.85	-2		$+\hat{8}$	64.98	- 4	47.38	+ 8	48.34	+3	60.23	+ 7
7	16.71	6	41.59	+ 6	64.34	-17	47.13	+ 6	48.10	0	60.17	+ 8
8	16.58	8	41.32	+ 2	63.72	26	46.88	+ 3	47.85	-4	60.10	+ 8
9	16.45	8	41.04	_ 2	63.12	-30	46.63	- I	47.61	6	60.02	+ 9
10	16.33	-7	40.76	6	62.54		46.37	- 5	47.37	8	59.94	+ 2
11	16.21	$-\frac{1}{5}$	40.48	- 9	61.97		46.11	-8	47.13	-8	59.85	_ 2
12	16.10	-2	40.20	-10	61.42		45.85	10	46.89	-7	59.76	- 6
13	15.99	+2	39.91	10	60.89		45.58	-11	46.66	一 5	59.66	- 9
14	15.89	+5	39.62	- 8	60.38		45.31	9	46.43		59.56	IC
15	15.79	+7	39.33	- 5	59.89		45.04	- 6	46.20		59.45	<u> </u>
sec ð, tg ð	+13		-+13		+49		+49	.60		2.29		

		51	Hev. (Cephei 5°	.2.	ı II	ev. Dr	aconis 4	·3·	εUrsa	ae mi	noris 4 ^m .	2.
191	3	AR.	GI.	Dekl.	Œ Gl.	AR.	∝ Gl.	Dekl.	Gl.	AR.	€ 61.	Dekl.	Œ GI.
		7 ^h °	in 8 0.01	+87° 11′	in "0.01	9 ^h 24 ^m	in o.or	+81°42′	in "0.01	16 ^h 54 ^m	in 8 0,01	+82° 10′	in ".0.01
Febr	. 6	36.53	+11	33.51	— I	59.57	+3	45.47	4	46.67	-3	28.35	-6
	7	36.35	+10	33.79	+ 3	59.61	+4	45.77	0	46.81	1	28.17	-8
	8	36.16	+ 7	34.07	+ 6	59.64	+3	46.07	+ 4	46.95	+1	27.99	8
	9	35.97	+ 3	34-34	+ 9	59.67	+2	46.37	+ 8	47.09	+3	27.82	-7
	10	35.77	— 3	34.62	+10	59.70	+1	46.67	+10	47.24	+5	27.65	-4
	11	35.55	- 8	34.89	+ 8	59.72	I	46.97	+10	47.39	+5	27.49	0
BID	12	35.33	-12	35.16	+ 6	59.74	-3	47.27	+ 8	47.54	+5	27.34	+4
برج	13	35.11	-14	35.42	+ 2	59.76	-4	47-57	+ 5	47.69	+4	27.19	+7
8	14	34.88	-14	35.68	_ 2	59.77	-5	47.87	+ 2	47.84	+2	27.05	+9
	15	34.64	-11	35.93	— <u>5</u>	59.78	-4	48.17	- 2	47.99	0	26.92	+9
	16	34.39	- 6	36.18	- 7	59.79	- 3	48.48	— 5	48.14	2	26.79	+7
	17	34.14	— I	36.43	– 8	59.79	-1	48.78	- 7	48.29	—3	26.67	+4
	18	33.88	+ 4	36.67	— 6	59.79	0	49.08	- 7	48.45	-3	26.55	0
	19	33.61	+ 9	36.91	- 4	59.79	+-2	49.38	— <u>5</u>	48.61	-3	26.44	-4
	20	33.34	+11	37.15	0	59.79	+3	49.68	— 3	48.76	2	26.34	-7
	2.1	33.06	+11	37.38	+ 3	59.78	+4	49.99	+ I	48.92	—I	26.25	<u>-9</u>
	22	32.77	+ 9	37.61	+ 6	59.77	+4	50.29	+ 4	49.07	+1	26.16	-9
	23	32.48	+ 5	37.83	+ 8	59.76	+3	50.59	+ 6	49.23	+2	26.08 26.00	-7
	24 25	32.18 31.87	-+ I	38.05 38.26	+ 7	59.74	+1	50.89	+ 7 + 6	49.39	+3		-4
			- 4		+ 5	59.72	0	51.19		49-55	+3	25.93	
	2 6	31.56	- 7	38.47	+ 2	59.70	2	51.49	+ 3	49.71	+2	25.86	+3
	27	31.24	- 8	38.67	- 2	59.67	-3	51.79	0	49.87	0	25.81	+6
März	28	30.92	- 7		- 5 - 8	59.64	-3	52.08	- 4	50.03	-I	25.76	+8
IVI al Z	1 2	30.59 30.26	- 4 o	39.06	— IO	59.61	<u>-3</u>	52.37 52.66	- 7	50.19	-3	25.72 25.68	$ +8 \\ +6$
		_		39.25		59-57	$-\mathbf{I}$		- 9	50.35	-4		
	3	29.92	+ 4		- 9	59.53	0	52.95	-10	50.51	-4	25.65	+-2
	4	29.58	+ 8	39.61	- 7	59.49	+2	53.24	- 8 6	50.67	-4	25.62	—I
	5	29.23 28.88	+11	39.78	<u> </u>	59.45	+3	53.52	- 6 - 2	50.83	<u>-3</u>	25.61 25.61	─5 ─7
	7	28.52	+ 9	39.95 40.11	+ I + 5	59.40	+4 +4	54.08	$\begin{vmatrix} -2 \\ +3 \end{vmatrix}$	50.99	-2 0	25.61	8
	8			11									_8
		28.16 27.80	-		+ 8	59.30	+3	54.36	+ 7	1	+2	25.62	
	9 10	1	6	' '	+ 9		+1	54.63	+ 9		+4	25.63	-5 -2
	11	27.43 27.06	- II	11		59.19	—1 —2	54.90	+10	1 -	+5 +5	25.64 25.66	+2
	12	26.68	—I4		+ 4		-4	55.17	+ 7		+4	25.69	+6
	13	26.30			0				+ 3				+8
	14	25.92				0	-5 -5	55.7° 55.96	+ 3 - I		+3 +1	25.73 25.77	+9
	15	25.53		'	-4 -6		-5 -4	56.22	4		-I	25.82	+8
	-)		9	7-1-9			7]		7		75.24	'
sec δ,	tg δ	+2	0.43	-1-20	.40	+6	.94	+6	.87	+7.	35	+7.	28

1012	ð Uı	sae m	inoris 4º	.3.	λUr	sae mi	inoris 6"	.8.	76	Drac	conis 6 ^m .	0.
1913	AR.	C Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	€ Gl.	AR.	GI	Dekl.	Œ Gl.
1 117	18h om	in s o.o1	+86° 36′	in "0.01	19 ^h 6 ^m	in 8 0.01	+89°0′	in 0.01	20 ^h 48 ^m	in 0.01	+82° 12′	in
Febr. 6	1.97	- 8	27.91	- 4	3.43	-30	22.10	— 2	44.21	-4	28.54	+ :
7	2.22	- 4	27.67	- 7	3.95	_2I	21.81	- 6	44.22	-4	28.21	_ :
8	2.47	0	27.43	- 9	4.50	8	21.52	- 9	44.23	-3	27.88	_ ;
9	2.73	+ 5	27.19	8	5.07	+ 8	21.24	- 9	44.24	$-\mathbf{I}$	27.55	!
10	2.99	+ 9	26.96	— 6	5.66	+24	20.96	8	44.26	+1	27.22	I
11	3.25	+12	26.73	- 3	6.27	+35	20.68	- 5	44.28	+3	26.90	:
12	3.52	+12	26.51	+ I	6.90	+41	20.40	_ 2	44.30	+4		_
13	3.80	+10	26.30	+ 5	7.55	-1-40	20.13	+ 2	44.33	+5	26.25	
14		+ 7	26.09	+ 8	8.23	+32	19.87	+ 6	44.36	+5	25.93	+
15	4.37	+ 3	25.88	+ 9	8.93	+19	19.60	+ 8	44.39	+4	25.61	+
16	4.66	- I	25.68	+ 8	9.65	+ 3	19.34	+ 8	44.42	+2	25.29	+
17	4.95	— 5	25.49	+ 6	10.38	-12	19.08	+ 7	44.46	0	24.98	+
18	5.25	_ 8	25.30	+ 2	11.12	-24	18.83	+ 4	44.50	-2	24.66	+
19	5.56	— 8	25.12	- 2	11.89	-30	18.58	0	44.55	-3	24.35	+
20	5.86	- 7	24.94	- 5	12.68	-30	18.34	- 4	44.60	4	24.04	
21	6.17	- 5	24.77	— 8	13.49	-24	18.10	- 7	44.65	-4	23.73	_
22	6.48	— I	24.60	- 9	14.32	-14	17.87	— 8	44.70	— 3	23.42	
23	6.80	+ 2	24.44	- 8	15.16	— I	17.64	- 8	44.76	-2	23.12	-
24	7.12	+ 5	24.29	— 5	16.02	+11	17.42	6	44.82	0	22.82	-
25	7.44	+ 6	24.14	— I	16.90	+19	17.20	— 3	44.88	+2	22.52	-
2 6		+ 6	24.00	+ 2	17.79	+22	16.98	+ 1	44.94	+3	22.22	
27		+ 4	23.86	+ 6	18.70	+18	16.77	+ 5	45.01	+3	21.92	+
28		+ 1	23.73	+ 8	19.63	+10	16.57	+ 8	45.08	+3	21.63	+
März 1	8.75	- 3	23.60	+ 9	20.57	- 2	16.37	+ 9	45.15	+2	21.34	+
2,	9.09	- 7	23.48	+7	21.53	-15	16.17	+ 9	45.23	0	21.06	+1
3	9.43	- 9	23.37	+ 5	22.50	-26	15.98	+ 7	45.31	-2	20.78	+
4	9.77	-10	23.27	+ I	23.48	-32	15.80	+ 3	45.39	-3	20.50	+
5	IO.II	- 9	23.17	- 3	24.47	-32	15.62	— I	45.47	4	20.22	+
6	10.45	- 6	23.08	- 6	25.48	-26	15.45	- 5	45.56	-4	19.95	_
7	10.80	_ 2	22.99	- 8	26.50	-14	15.28	– 8	45.65	-3	19.68	
8		+ 3	22.91	- 9	27.53	+ 1	15.12	- 9	45.74	-2	19.42	_
9	11.50			- 7	28.57			- 9	45.83	0		— 1
10	11.85		22.76	- 4			14.81	一 7				-
11	12.20		22.70		30.70			- 3				-
12	12.55	+11	22.65	- 4	31.78	+41	14.52	+ 1	46.13	-+-5	18.41	
13	12.90		22.60	+ 7	32.87	+36	14.39	+ 4	46.23	+-5	18.17	
14	13.25		22.56	+ 9	33.96	+25	14.26	+ 7	_		17.93	+
15	13.61	0		+ 9	35.07		14.14	+ 8	46.45	+3		+
ec δ, tg δ	+16		+16.	8 <i>n</i>	+5'		+57	= 6	+7.3	.0		-

1913 März 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 April 1 2 3 4 5 6 7 8	43 F	Hev. C	ephei 4	-3-	α Ur	sae m	inoris 2ª	.o.		Gr. 75	so 6 ^m .8.	
1913	AR.	Œ Gl.	Dekl.	GI.	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	Œ Gl.
	o ^h 56 ^m	in 0.01	+85°47′	in 0.01	1 ^h 26 ^m	in o.o.	+88° 50′	in "o.or	4 ^h 8 ^m	in 0.01	4-85° 19′	in 0.01
März 15	15.79	+7	39-33	5	59.89	+23	45.04	6	46.20		59.45	— 9
	15.70	+7	39.04	I	59.41	+26	44.77	- 2	45.97		59.33	- 6
17	15.61	+6	38.75	+ 3	58.95	+23	44.49	+ 2			59.21	- 3
18	15.53	+4	38.46	+ 6	58.51	+16	44.21	+ 5	45.51	+5	59.08	+ 1
19	15.45	0	38.16	+ 8	58.09	+ 5	43.93	+ 7		-	58.95	+ 5
20	15.38	—3	37.86	+ 8	57.69	_ 8	43.64	+ 8	45.07	+2	58.81	+ 8
2.1	15.32	6	37.56	+ 6	57.32	— 18	43.35	+ 7	44.85	0	58.67	+ 9
22	15.27	- 7	37.26	+ 3	56.96	-25	43.06	+ 5	44.63	3	58.52	+ 8
23	15.22	-7	36.96	0	56.62	26	42.77	+ I	44.42	4	58.37	+ 6
24	15.17	<u>6</u>	36.66	— 3	56.30	22	42.47	2	44.21	— 5	58.21	+ :
25	15.13	-3	36.35	— 5	56.00	-13	42.18	- 4	44.00	-4	58.05	
2 6	15.09	+1	36.05	— 5	55.72	0	41.89	6	43.79	-3	57.88	
27	15.06	+4	35.74	— 5	55.46	+13	41.59	— 5	43.59	0	57.70	'
28	15.04	十7	35.44	- 3	55.22	+24	41.29	- 3	43.39		57-52	-
29	15.02	+-8	35.13	+ 1	55.00	+30	40.99	I	43.20	+-6	57.34	-
-30	15.01	+8	34.83	+ 4	54.80	+31	40.69	+ 3	43.01	+7	57.15	_
	15.00	+6	34.52	+ 7	54.62		40.39	+ 6	42.82	+8	56.96	
April 1	15.00	+3	34.22	+ 8	54.46	+15	40.09	+ 8	42.63	+7	56.77	+ .
2,	15.00	r	33.91	+ 9	54.32	+ 1	39.78	+ 9	42.45	+4	56.57	+
3	15.01	-4	33.61	+ 7	54.20	-12	39.48	+ 7	42.27	+1	56.36	+
4	15.02	-7	33.30	+ 4	54.11	-23	39.17	+ 5	42.10	-2	56.15	+
5	15.04	- 8	33.00	. 0	54.03	-29	38.87	+ 1	41.93	-5	55.94	+
	15.07	-8	32.70	- 4 - 8	_		38.56					+
	15.11	_3	32.40	_ 10	53.97	30 25	38.25	- 3 - 7	41.59		55.72 55.50	_
	15.19	_	31.80	-11	53.93 53.92	—15	37.94	_ 9	41.43	-	55.28	
							i .					
	15.24		31.50	- 9	53.93	- 2	37.64	11	41.28		55.05	-
	15.29		31.20	7	53.95	+10	37.33	-10	41.13		54.82	—I
11	15.35 15.42	+7	30.91	-3 + 1	54.00	+25	37.03 36.72	- 7	40.98		54.58	
			_		54.15	+ 25	36.42	- 4		_	54.34	
13	15.49		30.32	+ 5	154.26	+ 19	36.12	+ 4	40.70		54.10	
14	15.57		30.03	+ 7	54.38	+ 9			40.56		53.85	
15	15.65		29.74	+ 8					40.43		53.60	
16	15.74			+ 7					40.31			+
17	15.83			+ 5					40.19			+
18	15.93	1	28.89	+ 1					40.07		52.84	+
19	16.03	1 .	28.61	- 2	1 2 2 2				39.96			+
20	16.14		28.33	- 4	-		11				52.31	+
21	16.25	-I	28.05	- 5	55.83	 - 5	33.74	- 5	39.74	<u> </u>	52.05	1
sec δ, tg δ	+1	3.63	+13	.59	+4	9.58	+49	.57	+1	2.29	+12	.25

	51 l	Iev. C	ephei 5 ^m	.2.	ı lle	v. Dra	conis 4"	.3.	ε Ursa	ıe miı	noris 4".	2.
1913	AR.	Œ Gl.	Dekl.	€ Gl.	AR.	Gl.	Dekl.	« Gl.	AR.	Œ Gl.	Dekl.	€ 61.
	7 ^h °	in 8 0.01	+87° 11′	in 0.01	9 ^h 24 ^m	in o.or	+81°42′	in 01	16 ^b 54 ^m	in 0.01	+82° 10′	in 0.01
März 15	25.53	- 9	41.19	<u>6</u>	58.87	4	56.22	— 4	52.42	_I	25.82	+8
16	25.14	- 3	41.30	8	58.80	<u>-2</u>	56.48	_ 6	52.58	-2	25.87	+6
17	24.75	+ 2	41.41	-7	58.73	0	56.73	— 7	52.74	-3	25.93	+2
18	24.36	+ 7	41.51	-5	58.65	+1	56.98	– 6	52.89	-3	26.00	-2
19	23.96	+10	41.60	-1	58.57	+3	57.23	- 4	53.05	-3	26.08	6
20	23.56	+11	41.69	+2	58.49	+4	57.47	- I	53.20	-2	2 6. 1 6	-8
21	23.16	+10	41.77	+5	58.41	+4	57.71	+ 3	53.35	0	26.25	-9
22	22.76	+ 7	41.84	+-7	58.33	+3	57.94	+ 5	53.50	+1	26.35	8
23	22.35	+ 2	41.91	-+-8	58.24	+2	58.17	+ 7	53.65	+2	26.46	-5
24	21.95	_ 2	41.97	+6	58.15	0	58.40	+ 6	53.80	+3	26.56	-2
25	21.54	- 6	42.03	+4	58.05	— I	58.62	+ 5	53.95	+2	26.67	+2
26	21.13	- 8	42.08	0	57.96	-2	58.84	+ 2	54.10	+1	26.79	+-6
27	20.72	- 8	42.13	<u>-4</u>	57.86	-3	59.05	- 2	54.24	0	26.92	+8
28	20.31	— 6	42.17	-7	57.76	-3	59.26	- 6 0	54.39	-2	27.05	+8
29	19.90	<u> </u>	42.20	<u>-9</u>	57.66	-2	59.47	- 8	54.53	-3		+7
30	19.49	+ 3	42.23	<u>-9</u>	57.56	0	59.67	-10	54.67	-4	, 00	+4
31	19.08	+ 7	42.25	8	57.46	+1	59.87	<u> </u>	54.81	-5	27.48	0
April 1	18.67 18.25	+10	42.26	-5	57.36	+3	60.06	7	54.95	4	27.63	-4
2	17.83	+10	42.27	—I +3	57.25	+4+4	60.25	- 3 + I	55.09	-3 -1	27.79 27.96	-7 -8
3							1					
4	17.42	+ 7	42.27	+7	57.03	+3	60.61	+ 5	55.36	+1	28.13	$-8 \\ -6$
5 6	17.01 16.60	+ 2	42.26 42.24	+9	56.92	+2	60.79 60.96	+ 8		+3	2 8.30 2 8.48	
7	16.19	- 4 - 9		+9 +8	56.70	-2	61.13	+10		+5 +5	28.67	-3 +1
8	15.78	-13	42.19	+5	56.58	-3	61.29	+ 8	72.2	+5	28.86	+5
					56.46				56.00			
9 10	15.37 14.97	-15 -14	42.16	+I -3	56.34	-4 -5	61.45	+ 5 + I	1 -	+3+2	29.05 29.25	+8 +9
11	14.57	10	42.07	-6	56.22	$\begin{bmatrix} -3 \\ -4 \end{bmatrix}$	61.74	- 3		0	29.45	+9
12	14.17	- 6	42.02	-7	56.10	-3	61.88	- 6		-2	29.66	+7
13	13.77	0	41.96	-7	55.98	_I	62.02	- 7		<u>-3</u>	29.88	+4
14	13.37	+ 5	41.90	_6	55.86	+1	62.15	- 7			30.10	
15	12.97	+ 9	41.83	_3	55.74	+2	62.27	5		-3	30.32	-4
16	12.58	_	41.75	 +I	55.62	+3	62.39	_ 2		-2	30.55	-7
17	12.19			+4	55.50	+4	62.50	+ 1	1 -	0	30.78	<u>-9</u>
18	11.80			+7	55.37	+4	62.61	+ 5		+1	31.02	-8
19	11.41	+ 4		+8	55.24	+2	62.71	+ 6	1	+2	31.26	7
20	11.03	1		+7	55.11	+1	62.80	+ 7	1 ,, ,	+3	31.50	-3
21	10.65		ři –	+5	54.98	I	62.89	+ 6		+3	31.75	+1
sec δ, tg δ	+20	0.43	+20	. 4 I	+6	.04	 - -6	.87	+7.	25	+7.2	28

1010	δUr	sae m	inoris 4 ⁿ	.3.	λUr	sae mi	inoris 6"	·.8.	76 1	Drac	onis 6 ^m .c).
1913	AR.	Œ Gl.	Dekl.	Gl.	AR.	C Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	∝ Gl.
	18 ^h 0 ^m	in 0.01	+86° 36′	in or	19 ^h 6 ^m	in • •	+89°0′	in o.or	20 ^h 48 ^m	in 0.01	+82° 12′	in "
März 15	13.61	0.01	22.52	+ 9	35.07	+10	14.14	+ 8	46.45	+3	17.70	+ 6
16	13.96	- 4	22.49	+ 7	36.18	_ 6	14.02	+ 7	46.56	+1	17.47	+ 7
17	14.32	- 7	22.47	+ 4	37.30	-19	13.91	+ 5	46.67	I	17.25	+ 6
18	14.67	8	22.45	0	38.43	28	13.81	+ 2	46.78	-3	17.03	+ 4
19	15.03	_ 8	22.44	- 4	39.57	-30	13.71	2	46.90	-4	16.82	+ I
20	15.39	— 6	22.44	- 7	40.71	-27	13.62	— 6	47.02	-4	16.61	— 2
21	15.75	— 3	22.44	- 9	41.86	-18	13.53	- 8	47.14	-3	16.41	— 5
22	16.11	+ 1	22.45	- 8	43.01		13.45	_ 8	47.26	-2	16.21	— 7
23	16.46		22.46	<u> </u>	44.17	-	13.38	- 7	47.38	0	16.02	- 7
24	16.82	+ 6	22.48	— <u>3</u>	45.34	+16	13.31	- 4	47.51	+1	15.83	- 5
25	17.17	+ 6	22.51	+ 1	46.51	+21	13.25	0	47.64	+2	15.65	2
26	17.53	+ 5	22.54	+ 5	47.68	+20	13.19	+ 3	47.77	+3	15.47	+ I
27	17.88	+ 2	22.58	+ 7	48.86	+14	13.14	+ 7	47.90	+3	15.30	+ 5
28	18.23 18.58	$-2 \\ -6$	22.63 22.68	+ 9	50.04		13.10	+ 9	48.03	+2	15.14	+ 8
29				+ 8	,	-10	13.06	+ 9		+1		+10
30	18.93	- 9	22.74	+ 6	52.40	-22	13.03	+ 8	48.31	-I	14.83	+10
Annil 7	19.27	-10	22.81	+ 3	53.58	-31	13.01	+ 5	48.45	-3	14.68	+ 8
April 1	19.62	IO	22.88	— I	54.77	-33	12.99	+ I	48.59 48.73	-4	14.54	+ 4
3	19.96 20.30	-7 -4	22.96 23.04	— 5 — 8	55.96 57.14	-30 -20	12.98	-3	48.87	-4 -4	14.40	- 4
	_											1
4	20.64	+ I	23.13	- 9 - 8	58.32	- 5	12.97	- 9	49.01	2	14.15	- 7
5	20.98	+ 6	23.23		59.50 60.69	+11 + 26	12.98	9 8	49.16	+1	14.03	- 9 -10
7	21.64	+9 + 12	23.33 23.44	$\begin{bmatrix} - & 6 \\ - & 2 \end{bmatrix}$	61.87	+37	13.01		49.45	+3	13.80	_ 8
8	21.97	+12	23.44	+ 2	63.05	+41	13.04	- 5 - I	49.60	+5	13.70	- 5
											13.60	
9	22.30	+ 7	23.67	+6 + 8	64.22	+39 +30	13.07	+ 3	49.75	+5 +5		- I + 2
11	22.94	+ 2	23.79 23.92	+ 9	66.56			+ 8	1 '//	+3		+ 5
12	23.26	- 2	24.06	+ 8	67.73	+ 1	13.20	+ 8		+1	1	+ 7
13	23.57	- 6	24.20	+ 5	68.89	-14	13.25	+ 6	-	0		+ 7
14	23.88	- 8	24.35	+ 1	70.04	-25	13.31	+ 3		2	13.22	+ 5
15	24.19	- 8	24.50	- 3		-30	13.38	- I	1		1	+ 2
16	24.49			<u>- 6</u>		_	13.45	<u>-</u> 4	0 -	i.		_ T
17	24.79				73.48		13.53	- 7				- 4
18	25.09		24.99	- 9	74.61		13.62	_ 8				_ 6
19	25.38		25.16	- 7	75.73		il-	- 7		1		- 7
20	25.67	+ 5	25.34	- 4	()		13.81		1		1	_ 6
21	25.96		1	I				- 2			1	- 4
-		!				1	<u> </u>					1
sec 8, tg 8	+1	6.89	+16	.86	+5	7.51	+57	7.50	+7.	37	+7.	30

		43 E	Iev. C	ephei 4 ^m	-3.	αUr	sae m	inoris 2 ^m	.o.	G	r. 75	o 6 ^m .8,	
191	3	AR.	Œ Gl.	Dekl.	Gl.	AR.	Œ Gl.	Dekl.	⊄ Gl.	AR.	Gl.	Dekl.	€ Gl.
		o ^h 56 ^m	in 0.01	+85°47′	in o.or	1 26 m	in e o.o.	+88° 50′	in "0.01	4 ^h 8 ^m	in	+85° 19′	in 0.01
A pri	21	16.25	I	28.05	— 5	55.83	- 5	33.74	— <u>5</u>	39.74	<u>-5</u>	52.05	0.0
1	22	16.37	+3	27.78	- 5	56.11	+8	33.44	6	39.64	-4	51.78	-
	23	16.50	+6	27.51	- 4	56.42	+20	33.15	- 4	39.54	I	51.51	_
	24	16.63	+8	27.24	_ i	56.75	+28	32.87	- 2	39.45	+2	51.24	_
	25	16.76	+8	26.98	+ 3	57.09	+31	32.58	+ 1	39.37	+5	50.97	-
	2 6	16.90	+7	26.72	+ 6	57-45	+28	32.30	+ 5	39.29	+7	50.69	_
	27	17.04	+5	26.46	+ 8	57.83	+20	32.02	+ 7	39.22	+8	50.41	-
	28	17.19	+1	26.20	+ 9	58.23	+ 7	31.74	+ 9	39.15	+7	50.13	+
	29	17.34	-3	25.95	+ 8	58.64	- 6	31.46	+ 8	39.08	+6	49.85	+
	30	17.50	6	25.70	+ 5	59.07	-19	31.19	+ 6	39.02	+3	49.56	+
Mai	1	17.66	_8	25.46	+ 2	59-53	-27	30.92	+ 3	38.96	_r	49.28	+
	2	17.83	8	25.22	- 3	60.00	-30	30.65	I	38.91	-4	48.99	+
	3	18.00	-7	24.98	- 6	60.49	-27	30.39	- 5	38.86	-7	48.71	+-
	4	18.18	4	24.75	- 9	61.00	-19	30.13	- 9	38.82	-8	48.42	+
	5	18.36	-1	24.52	-rr	61.52	- 8	29.87	-10	38.78	-8	48.13	-
	6	18.55	+3	24.29	10	62.06	+ 5	29.61	-10	38.75	6	47.84	_
	7	18.74	+6	24.07	_ 8	62.62	+17	29.36	— 9	38.72	-4		_
	8	18.93	+7	23.85	- 4	63.19	+24	29.11	- 6	38.70		il .	—J
	9	19.13	+7	23.64	- r	63.78	+26	28.86	- I			1 6	-
	10	19.33	+6	23.43	+ 3	64.38	+22	28.62	+ 2	38.67	-1-4	1	-
	ΙI	19.54	+3	23.22	+ 6	65.00	+13	28.38	+ 6	38.66	+5	46.38	_
	12	19.75	0	23.02	+ 7	65.64	+ 2		+ 7	38.66			+
	13	19.96	-4	22.82	+ 7	66.29	10		+ 8	38.66			+
	14	20.18	6	22.63	+ 5	66.96	-21		+ 6				+
	15	20.40	-7	22.44	+ 3	67.64	26		+ 4	38.68			+
	16	20.62	— 7	22.26	_ I	68.34	-26	27.24	0	38.70	3	44.90	+
	17	20.85	-5	22.08	- 3	69.06	20	1	— 3	38.72		1	+
	18	21.08	-2	21.91	- 5	69.79	-10	1	- 5	38.75			+
	19	21.32	1	21.74	-6	70.53	+ 3	26.61	- 6				-
	20	21.56	+5	21.58	- 4	71.28	+16		— 5	38.83			-
	21	21.80	+7	21.42	_ 2	72.05	+26	26.21	- 3	38.87	+-1	43.43	_
	22	22.05	+8	21.26	+ 1	72.83	-+31		0	1 ~ .		11	-
	23	22.30	+-8	21.11			_		+ 3	38.97		- 0	_
	24	22.55	+6	20.96	+ 7		+24		+ 7				-
	25	22.81	+2	20.82	+ 9	75.26	+13	1	+ 8	{39.09 39.16		42.27	+
	26	23.06	I	20.69	+ 9	76.09							+
	27	23.32		20.56	+ 7	76.94		1	+ 9 + 7			'	+
	28	23.58	-5 -7	20.44	+ 7	77.80	-13	11 -	+ 4				+
			1 '		1. 3			',,,	1	37 3.	3		Ι.
sec δ,	to 8	+1	3.62	+13	3.58	+49	9.45	+49	9.44	+12	2.28	+12	2.24

107		51 H	Iev. C	ephei 5 [*]	.2.	I He	v. Dra	aconis 4	.3·	ε Urs	ae mi	noris 4 ^m .	2.
191	.3	AR.	Œ Gl.	Dekl.	C Gl.	AR.	∝ Gl.	Dekl.	C Gl.	AR.	Œ Gl.	Dekl.	C Gl.
		6 ^h 59 ^m	in 8 0.01	+87° 11′	in "o.or	9 ^h 24 ^m	in 0.01	+81°43′	in 	16 ^h 54 ^m	in s 0.01	+82° 10′	in ".o.o
April	21	70.65	- 5	41.29	+ 5	54.98	_r	2.89	+ 6	57-33	+3	31.75	+1
	22	70.27	— 7	41.18	+ 1	54.85	-2	2-97	+ 3	57.43	-i-2	32.00	+4
	23	69.89	— 8	41.07	— 2	54.72	-3	3.05	— I	57.52	0	32.26	+7
	24	69.52	- 7	40.95	- 6	54.59	<u></u> -3	3.12	- 4	57.61	I	32.52	+8
	25	69.15	— 3	40.82	- 9	54.46	-2	3.19	— 7	57.70	-3	32.78	+7
	26	68.79	+ 1	40.69	-10	54.33	—ı	3.25	- 9	57.79	-4	33.05	+
	27	68.43	+ 6	40.55	<u> </u>	54.20	0	3.31	-10	57.87	-4	33.32	+2
	28	68.08	+10	40.41	— 6	54.07	+2	3.36	8	57.95	-4	33.60	-2
	29	67.73 67.38	+11	40.26	_ 2	53.94	+3	3.41	- 5	58.03 58.11	-3	33.87	
	30		+11	40.11	+ 2	53.81	+4	3.45	— I		-1	34.15	
Mai	1	67.04	+ 9	39.95	+ 6	53.68	+4	3.48	+ 3	58.19	+1	34.43	-9
	2,	66.70	+ 4	39.79	+ 8	53.55	+3	3.51	+ 7	58.26	+3	34.71	
	3	66.37 66.04	— I	39.62 39.45	+ 9	53.42	+I	3.54	+ 9 +10	58.33 58.40	+4	35.00	-
	5	65.72	- 7 -11	39.45	+ 9 + 6	53.28	—I	3.56 3.57	+ 9	58.46	+5 +5	35.30	+
						ľ	<u>-3</u>	11		_		1	
	6	65.40	-14	39.10	+ 3	53.02	-4	3.58	+ 6	58.52	+4	35.88 36.18	+
	7 8	64.78	-14 -12	38.91 38.72	I	52.89	5	3.58	+ 2 - I	58.58 58.64	+2 +1	36.48	+9
	9	64.48	-8	38.53	— 4 — 7	52.76 52.63	-4 -3	3.57 3.56	- 5	58.69	—I	36.79	+8
	10	64.18	_ 2	38.33	_ 8	52.50	-2	3.55	_ 6	58.74	-3	37.09	+
	11	63.89		38.12	_ ₇		0		- 7	58.79			+
	12	63.60	+ 3 + 8	37.91	- 7 - 4	52.37 52.24	+2	3.53 3.50	_ 6	58.83	$-3 \\ -3$	37·39 37·70	-
	13	63.32	+10	37.70	- I	52.11	+3	3.46	— 3	58.87	-2	38.01	
	14	63.05	+11	37.48	+ 3	51.98	+4	3.42	0	58.91	— I	38.32	
	15	62.78	+ 9	37.26	+ 6	51.85	+4	3.37	+ 4	58.95	0	38.63	-
	1 6	62.52	+ 6	37.03	+ 8	51.72	+3	3.32	+ 6	58.99	+2	38.94	
	17	62.27	+ 1	36.80	+ 8	51.59	+1	3.26	+ 7	59.02	+3	39.25	
	18	62.02	- 3	36.57	+ 6	51.46	0	3.19	+ 6	59.05	+3	39.57	-
	19	61.78	— 7	36.34	+ 3	51.34	-2	3.12	+ 4	59.08	+2	39.89	+
	2 0	61.54	- 8	36.10	- I	51.22	-3	3.05	+ 1	59.10	+1	40.21	+
	21	61.31	- 7	35.86	- 5	51.10	— 3	2.97	- 3	59.12	0	40.53	1+
	22	61.08	— 5	35.61	- 8	50.97	-3	2.88	- 7	59.14	-2	40.85	+
	23	60.86	— I	35.36	10	50.85	—I	2.79	- 9	59.15	-4	41.17	+(
	24	60.65	+ 4		- 9		0	2.69	-10		-5	41.49	+
	25	60.45	+ 8	34.85	- 7	50.61	+2	2.58	- 9	59.17	5	41.81	-
	2 6	60.25	+11	34.59	- 4	50.49	+3	2.47	— 7	59.18	4	42.13	
	27	60.06		34.33	0	50.37	+4	2.35	— 3	59.18	-2	42.45	
	28	59.88	+10	34.06	+ 4	50.25	+4	2.23	+ 2	59.18	0	42.77	8
sec ò,	to d	+20	0.42	+20.	40	+6	.04	- 1 -6.	87	+7.	35	+7.2	8

	δU	rsae m	inoris 4 ^m	.3.	λUr	sae m	inoris 6 ^m	.8.	76	Drac	onis 6 ^m .c).
1913	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	€ Gl.	AR.	Gl.	Dekl.	∝ Gl.
	18 ^h 0 ^m	in 0.01	+86° 36′	in "O.OI	19 ^h 7 ^m	in s o.or	+89°0′	in 	20 ^h 48 ^m	in 0.01	+82° 12′	in " o.o.i
April 21	25.96	+ 6	25.52	—I	17.96	+20	13.91	-2	51.59	+-2	12.94	— Z
22	26.24	+ 5	25.71	+3	19.06	+21	14.02	+2	51.75	+3	12.93	(
23	26.52	+ 3	25.90	+6	20.15	+17	14.13	+6	51.91	+3	12.92	+ ;
24	26.79	0	26.10	+8	21.23	+ 7	14.25	+8	52.07	+2	12.92	+
25	27.06	- 4	26.30	+9	22.30	— <u>5</u>	14.38	+9	52.22	$+\mathbf{I}$	12.92	+
26	27.32	- 8	26.51	+7	23.36	— 1 8	14.51	+9	52.38	0	12.93	+1
27	27.58	-10	26.72	+4	24.42	-28	14.64	+6	52.54	-2	12.95	+
28	27.83	-10	26.94	0	25.46	-33	14.78	+2	52.70	-3	12.98	+
29	28.08	- 9	27.16	-4	26.49	-32	14.93	-2	52.86	-4	13.01	+
30	28.33	— 6	27.39	- 7	27.51	-25	15.08	6	53.02	-4	13.05	—
Mai 1	28.57	— I		-9	28.52	12	15.24	-8	53.18	-3	13.09	
2,	28.81	+ 4		8	29.52	+ 4	15.40	-9	53.34	I	13.14	_
3	29.04	+ 8	28.09	-7	30.50	+20	15.57	-8	53.50	+1	13.20	—I
4	29.26	+11	28.33	-4	31.47	+33	15.74	6	53.65	+3	13.26	-
5	29.48	+12	28.57	+1	32.43	+40	15.92	-2	53.81	+4	13.33	_
6	29.70	+11	28.82	+4	33.38	+41	16.10	+1	53.96	+5		_
7	29.91	+ 8	29.07	十7	34.31	+34	16.29	+5	54.12	+5		+
8	30.11	+ 4	29.33	+9	35.23	+22	16.48	+7	54.27	+4	00	+
9	30.31	0	/ //	+-8	36.13	+ 7	16.68	+8	54.42	+2	0 0	+
10	30.50	- 4	29.85	+6	37.02	8	16.88	+7	54.57	0	J , .	+
11	30.68	— 7		+3	37.90	-20	17.09	+4	54.73	-2	J .	+
12	30.86	— 8	0 00	I	38.76	28	17.30	+1	54.88	-3		+
13	31.04	- 7		<u>-5</u>	39.60	-29	17.51	-3	55.03	4		
14	31.21	— 5	30.94	-8	40.43	-24	17.73	<u>-6</u>	55.18	-4		-
15	31.37	— 2	31.22	<u>-9</u>	41.24	-14	17.95	-8	55.33	-3	14.30	-
16	31.53	+ 2	31.50	8	42.04	- 2	18.18	-8	55.48	-2		-
17	31.68	+ 5		-6	42.82	+10	18.41	-7	55.63	C		-
18	31.83	+ 6	,	-2	43.58	+18	18.65	-4	55.78	+1	- ,	-
19	31.97	+ 6		+2	44.33	+22	18.89	0	55.92	+3		_
20	32.10	+ 4	32.65	+5	45.06	+19	19.13	-+-4	56.07	+3	15.01	+
2.1	32.23	+ 1	0 7 1	+-8	45.76	+11	19.38	+8	56.21	+3		+
22	32.35	- 3		+9	46.45	0	19.63	+9	56.35	+2	20.	+
23	32.47	- 6	333	-1-8	47.13	-14	19.89	+9	56.49			+3
24 25	32.58 32.68	- 9 10		+5 +2	47.79 48.43	-25 -33	20.15	+7 +4	56.63		00	+
26	32.78		3	-2	49.05	-34	20.67	0	56.91			-+-
27	32.87	- 7		6	49.65		20.94	-4	57.05			-
2,8	32.95	— 3	35.06	8	50.23	-18	21.21	-7	57.18	-3	16.44	
sec δ, tg δ	-1-1	6.90	+16	.87	+5	7.56	+-57	.55	+7.	27	+7	30

		43	Hev. (Cephei 4 ^m	-3-	α U:	rsae m	inoris 2"	.0.	(Gr. 75	50 6 [™] .8.	
191	3	AR.	Gl.	Dekl.	Gl.	AR.	Gl.	Dekl.	∝ Gl.	AR.	∝ Gl.	Dekl.	Gl.
		o ^b 56 ^m	in s o.o.	+85°47′	in 	1 27 m	in o.or	+88° 50'	in "O.OI	4 ^h 8 ^m	in 0.01	+85° 19′	in ".
Mai	28	23.58	-7	20.44	+ 3	17.80	-24	24.93	+ 4	39.38	-3	41.12	+ 8
	29	23.85	<u>-8</u>	20.32	I	18.66	-30	24.77	0	39.47	- 5	40.84	+ 6
	30	24.12	-7	20.20	- 5	19.54	-29	24.61	- 4	39.56	$-\tilde{8}$	40.56	+ 2
	31	24.39	<u>-5</u>	20.09	- 8	20.43	-23	24.46	- 7	39.66	8	40.28	<u> </u>
Juni	I	24.66	-2	19.99	-10	21.34	-12	24.31	_ro	39.76	- 7	40.00	- 5
	2	24.94	+1	19.89	-10	22.25	0	24.17	-11	39.87	5	39.73	_ 8
	3	25.21	+5	19.80	- 9	23.18	+12	24.03	- 9	39.98		39.45	-10
	4	25.49	+7	19.71	- 6	24.11	+21	23.90	- 7	40.09		39.18	- 9
	5	25.77	+7	19.63	- 2	25.05	+26	23.77	— ['] 3	40.21	+3	38.91	- 7
	6	26.05	+6	19.55	+ 2	26.00	+24	23.65	+ 1	40.33	+5	38.64	<u> </u>
	7	26.34	+4	19.48	+ 5	26.96	+17	23.53	+ 4	40.46	+5	38.37	
	8	26.63	+1	19.42	+ 7	27.93	+ 6	23.42	+ 7	40.59	+4	38.11	+ 4
	9	26.92	-3	19.36	+ 7	28.91	_ 6	23.31	+ 8	40.73	+2	37.85	+ 7
	10	27.21	-6	19.30	+ 6	29.89	-17	23.20	+ 7	40.87	0	37.59	+ 9
	ΙI	27.50	-7	19.25	+ 5	30.89	-25	23.10	+ 5	41.01	-3	37.33	+ 8
	12	27.80	_8	19.21	+ 1	31.89	-27	23.01	+ 2	41.16	-4	37.08	+ 6
	13	28.09	-6	19.17	- 2	32.90	-23	22.92	_ I	41.31	5	36.83	+ 3
	14	28.39	-3	19.14	$-\frac{7}{5}$	33.92	-15	22.84	— 4	4x.47	<u>-5</u>	36.58	_ 1
	15	28.68	0	19.11	- 6	34.94	- 3	22.77	_ 6	41.63	-3	36.33	_ 4
	16	28.98	+3	19.09	- 5	35.97	+11	22.70	- 6	41.80	0	36.09	- 7
	17	29.28	+6	19.07	- 3	37.00	+22	22.63	- 4	41.97	+3	35.85	_ :
	18	29.58	+8	19.06	0	38.04	+29	22.57	_ I	42.14	+5	35.61	6
	19	29.88	+8	19.06	+ 4	39.09	+31		+ 2	42.32	+7	35.37	_ 4
	20	30.19	+7	19.06	+ 7	40.14	+27	22.47	+ 5	42.50	-	35.14	- :
	21	30.49	+4	19.07	+ 9	41.20	+18	22.43	+ 8	42.69	+7	34.91	+ 3
	22	30.80	0	19.08	+ 9	42.26	+ 5	22.39	+ 9	42.88	+5	34.68	+ 6
	23	31.10	-3	19.10	+ 8	43.33	<u> </u>	22.36	+ 8	43.07	+2	34.46	+ 8
	24	31.41	6	19.12	+ 5	44.40	-21	22.33	+ 6	43.27	—I	34.24	+ 8
	25	31.71	8	19.15	+ 1	45.48	—28	22.31	+ 2	43.47	-4	34.02	+
	26	32.02	8	19.18	<u> </u>	46.56	-30	22.29	_ 2	43.67	− 7	33.81	+ 6
	27	32.32	-6	19.22	_ 7	47.64	-2 6	22.28	- 6	43.88		33.60	
	28	32.63	-3	19.22	-10	1 .	-17	22.27	- 9	44.09	_8	33.40	`
		32.93	0	19.32		49.82			_	44.30		33.20	
	30	33.24	+3	19.32		50.91			-10	44.52	1	33.20	- 0
Juli	3°	33.55	+6	19.44	-7	52.00			_ 8	44.74	0	32.81	-10
		33.86		1								32.62	8
	2,	34.16	+7	19.51		53.10	1	22.30	— 5 — T	44.97			
	3	34.10	+7+5	19.58	+ 4	1 -	_	22.32	- I + 3	45.20 45.43		II.	- !
	4	34.4/	1-2	19.00	1 4	22.20	720	44.33	' 3	45.43	')	34.43	
sec δ, t	tg δ	+13	3.62	+13.	58	+49	9.38	+49	37	+1	2.27	+12.	.23

		51 H	lev. Ce	ephei 5 ^m	2.	т Не	v. Dra	conis 4	·.3.	ε Ursa	e miı	noris 4 ^m	2.
191	3	AR.	Gl.	Dekl.	∝ Gl.	AR.	Œ Gl.	Dekl	Œ Gl.	AR.	Œ GI.	Dekl.	C Gl.
		6 ^h 59 ^m	in 0.01	+87° 11′	in ". o.o.	9 ^b 24 ^m	in 8 0.01	+81°42′	in ".01	16 ^h 54 ^m	in "O.OI	4-82° 10′	in 0.01
Mai	28	59.88	+10	34.06	+ 4	50.25	+4	62.23	+ 2	59.18	0	42.77	8
	29	59.71	+ 6	33.79	+ 7	50.14	+3	62.10	+ 6	59.18	+2	43.09	-8
	30	59.54	+ 1	33.51	+ 9	50.03	+2	61.97	+ 8	59.17	+3	43.41	6
	31	59.38	- 5	33.24	+ 9	49.92	0	61.84	+10	59.16	+5	43.73	3
Juni	1	59.22	-10	32.96	+ 7	49.81	-2	61.70	+ 9	59.15	+5	44.05	+2
	2	59.07	-13	32.68	+ 4	49.69	4	6r.55	+ 7	59.14	+4	44-37	+5
	3	58.93	-14	32.39	0	49.58	-4	61.40	+ 4	59.12	+3	44.68	+8
	4	58.80	-13	32.11	- 3	49.47	-5	61.25	0	59.10	+ 1	45.00	+9
	5	58.67	-10	31.82	— 6	49.36	-4	61.09	— 3	59.08	0	45.32	+9
	6	58.55	一 5	31.53	- 7	49.25	-2	60.92	— 6.	59.06	-2	45.64	+6
	7	58.44	+ 1	31.24	- 7	49.15	1	60.75	- 7	59.03	-3	45.96	+3
	8	58.34	+ 6	30.95	— 5	49.05	+1	60.58	— 6	59.00	-3	46.27	— 1
	9	58.24	+ 9	30.65	— 2	48.95	+3	60.40	- 4	58.97	-3	46.58	— 5
	10	58.15	+11	30.35	+ 2	48.85	+4	60.22	— I	58.93	- 1	46.89	-8
	11	58.07	+10	30.05	+ 5	48.75	+4	60.03	+ 2	58.89	0	47.20	<u>-9</u>
	12	58.00	+ 7	29.75	+ 7	48.66	+3	59.84	+ 5	58.85	$+\mathbf{I}$	47.51	8
	13	57.93	+ 3	29.45	+ 8	48.56	+2	59.64	+ 7	58.81	+2	47.82	6
	14	57.87	— 2	29.14	+ 7	48.47	+1	59.44	+ 7	58.76	+3	48.13	-3
	15	57.82	- 6	28.84	+ 4	48.38	-1	59.24	+ 5	58.71	+3	48.44	+1
	16	57.78	8	28.53	+ 1	48.29	-3	59.03	+ 2	58.66	+2	48.75	+5
	17	57.74	_ 8	28.22	— 3	48.20	3	58.81	— I	58.61	0	49.05	+7
	18	57.71	— 6	27.91	- 7	48.12	-3	58.59	- 5	58.55	2	49.35	+-8
	19	57.69	2	27.60	- 9	48.04	2	58.37	_ 8	58.49	3	49.65	+7
	20	57.68	+ 2	27.29	-10	47.96	-1	58.14	-10	58.43	-4	49.95	+4
	21	57.67	+ 7	26.97	- 9	47.88	+1	57.91	IO	58.36	- 5	50.25	+1
	22	57.68	+10	2 6.66	6	47.80	+2	57.68	_ 8	58.29	-4	50.54	-3
	23	57.69	+12	26.34	— 2	47.72	+4	57.45	- 4	58.22	- 3	50.83	-6
	24	57.71	+11	26.03	+ 3	47.65	+4	57.21	0	58.15	—I	51.12	-8
	25	57.73	+ 8	25.71	+ 6	47.58	+4	56.97	+ 4	58.08	+1	51.41	<u>-9</u>
	2 6	57.77	+ 3	25.40	+ 9	47.51	+2	56.72	+ 8	58.00	+3	51.69	7
	27	57.81	- 2	25.08	+ 9	47.44	+1	56.46	+ 9	57.92	+4	51.97	4
	28	57.86	8	24.76	+ 8	47.37	-1	56.20	+10		+5	52.25	0
	29	57.91	— 12	24.44	+ 6	47.30	-3	55.94	+ 8	57.75	+5	52.53	+4
	30	57.97	-14	24.12	+ 2	47.24	-4	55.68	+ 5	57.66	+4	52.80	+7
Juli	I	58.04	14	23.81	- 2	47.18	-5	55.41	+ 1	57.57	+2	53.07	+9
	2	58.12	11	23.49	- 5	47.12	-4	55.14	<u> </u>	57.48	0	53.34	+9
	3	58.20	- 7	23.17	- 7		-3	54.87	— 5	57.39	-r	53.61	+-8
	4	58.29	- r	22.85	- 7	47.00	-2	54.59	$-\tilde{6}$	57.29	-3	53.87	+5
sec δ, t	tg ð	+20	0.41	+20.	.38	+ -6	.04	-1-6.	87	+7.3	35	+7.2	8

		δUı	sae m	inoris 4ª	·3.	λU	rsae m	inoris 6	^m .8.	76	Drac	onis 6 ^m .	О.
191	3	AR.	Gl.	Dekl.	Gl.	AR.	Gl.	Dekl.	€ Gl.	AR.	Gl.	Dekl.	Œ Gl.
		18 ^h O ^m	in s o.o.i	+86° 36′	in	19 ^h 7 ^m	in 0.01	+89°0′	in 01	20h 48m	in s o.or	+82° 12′	in
Mai	28	32.95	— 3	35.06	-8	50.23	— 18	21.21	-7	57.18	<u>-3</u>	16.44	- 5
	29	33.03	+ 2	35.37	-9	50.80	- 3	21.49	<u>-</u> 9	57.31	-2	16.64	_ 8
	30	33.10	+ 6	35.68	-7	51.35	+13	21.77	-9	57.44	0	16.85	- 0
	31	33.17	+10	35.99	-5	51.87	+28	22.05	-7	57-57	+2	17.06	9
Juni	Ι	33.23	+12	36.31	I	52.37	+37	22.33	-4	57.70	+4	17.27	- 1
	2	33.28	+11	36.62	+3	52.86	+41	22.61	0	57.83	+5	17.49	_ 2
	3	33.33	+ 9	36.94	+6	53.33	+38	22.90	+4	57.95	+5	17.72	
	4	33.37	+ 6	37.25	+8	53.77	+28	23.20	+7	58.07	+4	17.95	+
	5	33.40	+ 1	37-57	+9	54.19	+14	23.49	+8	58.19	+3	18.19	+
	6	33.43	— 3	37.89	+7	54.60	— 2	23.79	+8	58.31	+1	18.43	+ 1
	7	33.45	_ 6	38.21	+4	54.99	15	24.09	+6	58.43	_r	18.67	+ 1
	8	33.46	- 8	38.53	0	55.36	-25	24.39	+-2	58.54	-2	18.92	+ .
	9	33.47	- 8	38.85	4	55.71	29	24.69	I	58.65	-4	19.17	+
	10	33.47	- 6	39.17	-7	56.03	-26	24.99	— 5	58.76	-4	19.43	
	II	33.46	- 3	39.49	<u>-9</u>	56.33	— 1 8	25.30	-7	58.87	-4	19.69	
	12	33.45	0	39.81	-9	56.61	- 7	25.61	-8	58.98	-2	19.95	_
	13	33.43	+ 4	40.13	-7	56.88	+ 5	25.92	- 7	59.09	— 1	20.21	_
	14	33.40	+6	40.45	-4	57.12	+16	26.24	— 5	59.19	+1	20.48	_
	15	33.37	+ 6	40.77	0	57.34	+21	26.55	1	59.29	+2	20.76	-
	16	33.33	+ 5	41.09	+4	57.54	+21	26.87	+3	59.39	+3	21.04	
	17	33.29	+ 2	41.42	+7	57.72	+15	27.18	+-6	59.49	+3	21.32	+
	18	33.24	I	41.74	+9	57.87	+ 5	27.50	+9	59.58	+3	21.61	+
	19	33.18	- 5		+8	58.01	- 9	27.82	+9	59.68	+1	21.90	+
	20	33.12	- 8	42.38	+6	58.12	-21	28.14	+8	59.77	I	22.19	+1
	21	33.05	-10	42.71	+3	58.21	-3I	28.46	+-6	59.86	-2	22.49	+
	22	32.97	-10		-ı	58.28	—35	28.79	+2	59.95	-4	22.79	+
	23	32.89	8	1000	-5	58.33	-32	29.11	-2	60.03	-4	23.09	+
	24	32.80	- 5		-8	58.35	-24	29.44	-6	60.11	-4	23.40	_
	25	32.70	0	137	-9	58.35	-10	29.76	-8	60.19	-3	23.71	-
	2 6	32.60	+ 4	44.30	-8	58.34	+ 6	30.09	<u>-9</u>	60.27	— r	24.02	
	27	32.49	+ 9	44.61	-6	58.30	+22	30.42	-8	60.34	+1	24.34	— I
	28	32.38	+11	44.93	-3	58.24	+34	30.75	-5	60.41	+3		
	29				+1	58.16		31.07	-2	60.48	+4		-
T 10	30	32.13			+5	58.06		31.40	+2	60.55	+5		-
Juli	I	32.00	+ 8		+-8	57.94	+32	31.73	+6	60.61	+5	25.63	+
	2	31.86	+ 3	46.17	+9	57.79		32.06	+7	60.67	+4		+
	3	31.72		11	+8		+ 5	32.39	+8	60.73	+2	1	+
	4	31.57	— 5	46.79	+6	57.43	-10	32.72	+6	60.79	0	26.62	+
ecδ,	49		5.92	+16	0.		7.72	+57		+7.		-+-7-	

		43	lev. C	ephei 4 ^m	3.	αU	rsae m	inoris 2º	.o.	G	r. 75	o 6 ^m .8.	
1913	3	AR.	Œ GI.	Dekl.	C Gl.	AR.	Œ Gl.	Dekl.	C Gl.	AR.	Œ Gl.	Dekl.	GI.
		o ^h 56 ^m	in 8 0.01	+85°47′	in "O.OI	1 ^h 27 ^m	in s o.01	+88° 50′	in 0.01	4 ^h 8 ^m	in 8 0.01	+85° 19′	in o.o.i
Juli	4	34.47	+-5	19.66	+ 4	55.30	+20	22.35	+ 3	45.43	+-5	32.25	_ r
	5	34.77	+2	19.75	+ 6	56.40	+10	22.38	+ 6	45.66	+5	32.07	+ 3
	6	35.08	I	19.84	+ 7	57.51	— I	22.42	+ 7	45.90	+3	31.90	+ 6
	7	35.38	-4	19.93	+ 7	58.6r	13	22.46	+ 7	46.14	+1	31.73	+ 8
	8	35.69	7	20.03	+ 5	59.72	22	22.51	+ 5	46.38	-2	31.56	+ 9
	9	35.99	8	20.14	+ 2	60.82	-27	22.57	+ 3	46.63	-4	31.40	+ 7
	IO	36.30	-7	20.25	_ I	61.93	-26	22.63	0	46.88	-5	31.24	+ 4
	11	36.60	-5	20.37	- 4	63.03	-19	22.69	— 3	47.13	-5	31.09	+ r
	12	36.90	-1	20.49	- 6	64.14	— 8	22.76	- 5	47.39	<u>-4</u>	30.94	- 3
	13	37.20	+2	20.62	— 5	65.24	1	22.84	– 6	47.64	-2	30.79	-6
	14	37.50	+5	20.75	- 4	66.34	+18	22.92	— 5	47.90	+1	30.65	— 7
	15	37.80	+-8	20.89	- I	67.44	+27	23.01	2	48.16	+4	30.51	- 7
	16	38.10	-+-8	21.03	+ 2	68.54	+31	23.10	+ I	48.43	+6	30.38	<u> </u>
	17	38.40	+7	21.18	-+- 5	69.64	+29	23.20	+ 4	48.70	+8	30.25	— 2
	18	38.69	+5	21.33	+ 8	70.74	+22	23.30	+ 7	48.97	+8	30.12	+ 2
	19	38.98	+2	21.49	+ 9	71.84	+10	23.41	+ 9	49.24	+6	30.00	+ 5
	20	39.27	-2	21.65	+ 9	72.93	— 3	23.52	+ 9	49.52	+4	29.88	+ 8
	21	39.56	-5	21.82	+6	74.02	-16	23.64	+ 7	49.79	0	29.77	+ 9
	22	39.85	-7	21.99	+ 3	75.10	-25	23.76	+ 4	50.07	-3	29.66	+ 8
	23	40.14	-8	22.17	— I	76.19	-30	23.89	. 0	50.35	-6	29.56	+ 5
	24	40.43	- 7	22.35	— 5	77.27	28	24.03	- 4	50.64	-8	29.46	+ 2
	25	40.72	-5	22.54	- 9	78.35	-21	24.17	8	50.92	8	29.37	— 2
	2 6	41.00	-1	22.73	-10	79.42	10	24.31	-10	51.21	-7	29.28	6
	27	41.28	+2	22.93	-10	80.49	+ 3	24.46	-11	51.50	-4	29.20	- 9
	28	41.56	+5	23.13	- 8	81.55	+15	24.61	- 9	51.79	-2	29.12	-10
	29	41.84	+-7	23.34	— 5	82.61	+23	24.77	6	52.08	+1	29.04	- 9
	30	42.11	+7	23.55	I	83.67	+26	24.93	- 3	52.37	+4	28.97	- 7
	31	42.38	+6	23.77	- - 2	84.72	+23	25.10	+ 1	52.66	-1-5	28.90	- 3
Aug.	1	42.65	+3	23.99	+ 5	85.76	+15	25.28	+ 5	52.96	+5	28.84	+ 1
	2	42.92	0	24.21	+ 7	86.80	+ 3	25.46	+ 7	53.26	+4	28.78	+ 5
	3	43.19	-3	24.44	+ 7	87.83	- 9	25.64	+ 7	53.56	+2	28.73	+ 8
	4	43.45	-6	24.67	+ 5	88.86	-19	25.83	+ 6	53.86	1	28.68	+ 9
	5	43.71	8	24.91	+ 3	89.88	26	26.02	+ 4	54.16	-3		+ 8
	6	43.97	— 7	25.15	0	90.90	-27	26.22	+ 1	54.46			+ 6
	7	44.23	-6	25.40	- 3	91.91	22	26.42	- 2	54.77	-6	28.57	+ 2
	8	44.49	-3	25.65	- 5	92.91	-13	26.63	- 5	55.07	-5	28.54	— 2
	9	44.74	+1	25.91	6	93.91	0	26.84	- 6	55.38			— 5
	10	44.99	+4	26.17	- 5	94.90	+13	27.06	— 5	55.69	0	28.50	- 7
sec 8, t	gδ	+13	3.62	+13	.58	+49	9.39	+49	.38	+12	2.27	+12	2.23

		51	Hev. (lephei 5 ⁿ	.2.	1 Пе	ev. Dr	nconis 4"	.3.	εUr	sae m	inoris 4	n.2.
191	13	AR.	Œ Gl.	Dekl.	Gl.	AR.	∝ GI.	Dekl.	(d).	AR.	€1.	Dekl.	∝ Gl.
		6 ^h 59 ^m	in o.o1	+87° 11′	in "0.01	9 ^h 24 ^m	in s o.o1	+81°42′	in 0.01	16" 54"	in 01	+82° 10′	in 0.01
Juli	4	58.29	— I	22.85	- 7	47.00	-2	54.59	– 6	57.29	-3	53.87	+5
	5	58.40		22.53	6	46.95	0	54.31	— 7	57.19	-3	54.13	$+\mathbf{I}$
	6	158.51 58.63	+ 8	22.21	- 3	46.90	+2	54.02	— 5	57.09	-3	54.38	-4
	7	58.75		21.58	+ 4	46.85	+3	53.73	— 2	56.99	-·2	54.63	-7
	8	58.88	+ 8	21.26	+ 7	46.80	+4	53.44	+ 1	56.88	I	54.88	9
	9	59.02	+ 4	20.95	+ 8	46.76	+4	53.15	+ 4	56.77	+1	55.13	9
	IO	59.16	0	20.63	+ 7	46.72	+2	52.86	+ 6	56.66	+2	55.37	- 7
	11	59.31	- 4	20.32	+ 5	46.68	+1	52.56	+ 7	56.55	+3	55.61	-4
	12	59.47	- 7	20.00	+ 2	46.64	-1	52.26	+ 6	56.43	+-3	55.85	0
	13	59.64	— 8	19.69	- 2	46.60	2	51.96	+ 4	56.31	+2	56.08	+4
	14	59.81	- 7	19.37	- 6	46.57	-3	51.65	0	56,19	+I	56.31	+7
	15	59.99	- 4	19.06	_ 8	46.54	3	51.34	- 4	56.07	-I	56.53	+8
	16	60.18	0	18.75	-10	46.51	-2	51.03	- 7	55.95	-3	56.75	+7
	17 18	60.38 60.58		18.44	- 9 - 7	46.48 46.46	—I	50.71 50.40	- 9 10	55.83	-4	56.96	+5
										55.70	-5		+2
	19	60.79 61.00		17.82	— 3	46.44	+2	50.08	— 9 — 6	55.57	-5	57.38	_2
	20 21	61.22		17.52 17.21	+ I + 5	46.42 46.40	+3 +4	49.76 49.44	— 0 — 2	55.44 55.31	-4 -2	57.58 57.78	—5 —8
	22	61.45		16.91	+ 8	46.38	+4	49.12	+ 2	55.18	0	57.98	9
	23	61.69	0	16.61	+ 9	46.37	+3	48.79	+ 6	55.04	+2	58.17	8
	24	61.93	- 5	16.31	+ 9	46.36	+1	48.47	+ 9	54.90	+4	58.36	<u>_5</u>
	25	62.18	-10	16.01	+7	46.35	0	48.14	+10	54.76	+5	58.54	-2
	2 6	62.44	-13	15.72	+ 3	46.34	-2	47.81	+ 9	54.62	+-5	58.72	+2
	27	62.70	-14	15.42	0	46.34	-4	47.48	+ 7	54.48	+4	58.90	+6
	28	62.97	-13	15.13	4	46.34	-5	47.15	+ 3	54.33	+3	59.07	-+-8
7	29	63.25	- 9	14.84	- 6	46.34	— 5	46.82	— і	54.18	+1	59.24	+9
	30	63.53	— 4	14.55	- 7	46.34	-4	46.49	— 4	54.03	—I	59.40	+8
	31	63.82		14.26	— 7	46.35	-2	46.16	— 6	53.88	2	59.56	-+-6
Aug.		64.11		13.98	- 4	46.35	0	45.82	- 7	53.73	-3	59.71	+2
	2	64.41	+ 9	13.70	— т	46.36	+1	45.49	— 6	53.58	-3	59.86	-2
	3	64.72		13.42	+ 2		+3	45.15	- 3	53.43	-2	60.00	-6
	4	65.03			+ 6	46.38	+4	44.81	0		-1	60.14	8
	5	65.35				46.40		44.47				60.28	<u>-9</u>
	6	65.68 66.01				46.42 46.44	+3	44.12		52.95 52.80		60.41 60.54	_8 5
	7		-	12.32			+2	43.78					<u>-5</u>
	8	66.35		12.05	+ 5		0	43.43				60.66	-2
	9	66.69 67.04				46.48 46.51		43.09	+ 5	52.48			+2
16-	10	07.04	- 0	11.54	4	40.51	-3	42.74	T 2	52.32	1	00.09	+5
sec δ,	tg δ	+20	.38	+20.	36	+6	.94	+6.	87	+7.	35	+-7.2	28

TO T.O.		δU	rsae n	ninoris 4ª	·.3·	λU	rsae m	inoris 6'	ⁿ .8.	76	l)rac	onis 6 ^m .c).
1913		AR.	(G1.	Dekl.	€ Gl.	AR.	Gl.	Dekl.	Gl.	AR.	Œ G!.	Dekl.	Gl.
		18h0m	in 0.01	+86° 36′	in "0.01	19 ^h 7 ⁿ	in s 0.01	+89°0′	in 	20 ^h 49 ^m	in o.ot	+82° 12′	in
Juli	4	31.57	— 5	46.79	+6	57.43	-10	32.72	+6	0.79	0	26.62	+ 7
	5	31.41	- 7	47.09	+3	57.22	21	33.05	+3	0.85	2		+ 5
	6	31.25	– 8	47.39	-2	56.99	-28	33.38	0	0.90	-3	27.30	+ 3
	7	31.08	6	47.69	-6	56.74	-28	33.71	-4	0.95	-4	27.64	— І
	8	30.91	- 4	47.99	8	56.47	-22	34.04	-7	1.00	-4	27.98	- 4
	9	30.73	I	48.28	<u>-9</u>	56.19	—II	34.37	-8	1.04	-3	28.32	— 6
	10	30.54	+ 3	48.58	8	55.86	+ 1	34.70	-8	1.08	-1	28.66	— 7
	II	30.35	+ 5	48.87	5	55.52	+12	35.03	-6	1.12	0	29.01	— 7
	12	30.15	+ 6	49.16	—I	55.17	-1-20	35.35	-3	1.16	+2	1	— <u>5</u>
	13	29.94	+ 6	49.45	+2	54.79	+22	35.68	+1	1.19	+3		- I
	14	29.73	+ 4	49.74	+6	54.39	+18	36.00	+5	1.22	+3	30.06	+ 3
	15	29.52	0		+8	53.97	+ 9	36.33	+8	1.25	+3	30.41	+ 6
	16	29.30	- 4	50.30	+9	53.53	- 3	36.65	+8	1.28	+1	30.77	+ 9
	17	29.08	_ 7	50.58	+7	53.07	-17	36.98	+9	1.31	0	31.13	+10
	18	28.85	-10	50.86	+5	52.58	28	37.30	+7	1.33	2	31.49	+ 9
	19	28.61	-11	51.13	+1	52.08	-35	37.62	+3	1.35	-3	31.85	+ 7
	20	28.37	— 9	51.40	-3	51.56	-34	37.94	-1	1.37	-4	32.21	+ 3
	21	28.12	- 6	51.67	<u>-6</u>	51.02	—28	38.26	-5	1.38	-4	32.57	— I
	22	27.87	- 2	51.94	-8	50.45	-16	38.57	-8	1.39	-3	32.93	— 5 — 8
	23	27.61	+ 2	52.20	<u>-9</u>	49.87	0	38.89	-9	1.40	-2	33.29	
	24	27.35	+ 7	52.46	-7	49.27	+16	39.20	-9	1.41	0	33.65	- 9
	2 5	27.08	+10	52.72	-4	48.65	+30	39.51	-6	1.41	+2	34.01	- 9
	26 27	26.81	+12	52.97	0	48.01	+38		-3	1.41	+4	34.38	- 7
	27 28	26.53 26.25	+11	53.22	+4	47.35	+41	40.13	+1	1.40	+5		- 3 o
			+ 9	53.46	+7	46.67	+36	40.44	+4	1.40	+5	35.12	
	2 9	25.96	+ 5	53.70	+9	45.97	+25	40.75	+7	1.39	+4	35.48 35.85	+ 4 + 6
	30	25.67	+ 1	53.94	+9	45.25	+11	41.05	+8	1.38	+3	35.05	
Aug.	3 ^I	25.37 25.07	-3 -6	54.18 54.42	+7 +3	44.51 43.76	- 4 -17	41.35	+7 +5	1.37	$+1 \\ -1$	36.58	$+7 \\ +6$
mug.	2	24.76	- 8	54.65	0	42.98	-26	41.95	+1	1.35	-3	1 -	+ 4
				54.88			-28						
	3	24.45 24.14	- 7	11	-4 -7	42.19 41.38	-24	42.24	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1.31	-4		+ I - 3
	4	23.82	- 5 - 2	55.10 55.32	-9	40.56		42.54 42.83	_8	1.26	-4 -2	0	- 6
	5	23.50			-8	39.72	$-\frac{1}{3}$		-8	1.23	-3		- 7
	7	23.17			-6	38.85		43.40	-7	1.20	0	0 (- 7
	8	22.84	+ 6		-3	37.97		43.69	-4	1.17	+1		_ 6
	9	22 50	L 6	r6 17	+1	37.07			0	1.13	+3		— 3
	10	22.16	+ 5	56.37	+-5	36.15		44.25	+4	1.09	+3		+ 1
sec δ, t _ℓ	g	+10		+16	.90	+5	7.92	-+57	.91	+-7	.38	 -+ 7	.31

	43	Hev.	Cephei 4 ^m	.3.	αlIr	sae m	inoris 2"	.o.	G	r. 7	50 6 ^m .8.	
1913	AR.	€ Gl.	Dekl.	≪ GI.	AR.	€Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Œ Gl.
	oh 56	in o.or	+85° 47′	in 0.01	1 28 m	in 8 0.01	+88° 50′	in or	4 ^h 8 ^m	in 6.01	+85° 19′	in 0.01
Aug. 1	0 44 99		26.17	- 5	34.90	+13	27.06	— 5	55.69	0	28.50	- 7
	1 45.24		26.43	_ 2	35.88	+24	27.28	- 3	56.00	+3		- 7
1	2 45.49	1 2	26.70	+ 1	36.85	+30	27.50	0	56.31	+6		- 6
1	3 45.73	_	26.97	+ 4	37.82	+31	27.73	+ 3	56.62	+-8	28.47	− 3
I	4 45.97	+6	27.24	+ 7	38.78	2 6	2 7.96	+ 6	56.93	 8	28.47	0
1	5 46.20	+3	27.52	+ 9	39.73	+16	28.20	+ 8	57.24	+7		+ 4
1	6 46.44		27.80	+ 9	40.67	+ 2	28.44	+ 9	57-55	-+-5		+ 7
1	7 46.67	-4	28.09	+ 7	41.61	-11	28.69	+ 8	57.87	+2		+ 8
I	8 46.90	-7	28.38	+ 5	42.53	22	28.94	+ 5	58.18	2	28.51	+ 8
I	9 47.12	-8	28.68	+ 1	43.45	-2 9	29.19	+ 2	58.50	-5	28.53	+ 7
2	0 47.34	8	28.98	- 4	44.36	29	29.45	— 3	58.81	-7	28.56	+ 3
2	1 47.56	-6	29.28	— 7	45.26	-24	29.71	— 7	59.13	-8	28.59	- I
2	2 47.77		29.58	-10	46.15	14	29.98	- 9	59-44	- 7	28.63	- 5
2			29.89	-10	47.03	- 2	30.25	10	59.76	-5	28.67	- 8
2	4 48.19	+4	30.20	一 9	47.90	+10	30.52	-10	60.07	-3	28.72	-10
2,	5 48.40	+6	30.51	- 7	48.76	+20	30.80	_ 8	60.39	0	28.77	10
2	6 48.60	+7	30.83	— 3	49.61	+25	31.08	- 4	60.70	+3	28.83	— 8
2	7 48.80	+7	31.15	+ I	50.45	+24	31.37	0	61.02	+5	28.89	— 5
2	8 49.00	+5	31.47	+ 4	51.28	+18	31.66	+ 3	61.33	+5	28.96	0
2	9 49.19	+1	31.80	+ 6	52.10	+ 8	31.95	+ 6	61.65	+4	29.03	+ 4
3	0 49.38	-2	32.13	+ 7	52.91	- 4	32.24	+ 7	61.96	+3	29.10	+ 7
3	I 49.56	-5	32.46	+6	53.71	16	32.54	+ 7	62.27	0	29.18	+ 8
Sept.	1 49.74	-7	32.79	+ 4	54.49	-24	32.84	+ 5	62.59	2	29.26	+ 8
	2 49.92	-8	33.13	+ I	55.27	-27	33.15	+ 2	62.90	-4	29.35	+ 7
	3 50.09	-7	33.47	— 2	56.04	-25	33.46	— I	63.22	-6	29.44	+ 3
	4 50.26	-4	33.81	- 5	56.79	-17	33.78	- 4	63.53	5	29.54	0
	5 50.43	-I	34.16	6	57-53	— 5	34.09	6	63.84	4	29.64	- 4
	6 50.59	+3	34.51	— 5	58.26	+ 8	34.41	- 6	64.15	I	29.75	— 6
	7 50.75	+6	34.86	— 3	58.98	+20	34.73	- 4	64.46	+2	29. 86	- 7
	8 50.91	+8	35.21	0	59.68	+28	35.06	— 2	64.77	+5	29.98	- 7
-	9 51.06	+8	35.56	+ 3	60.37	+32	35.39	+ 2	65.08	+ 7	30.10	— 5
I	51.21	+7	35.92	+ 6	61.05	+29	35.72	+ 5	65.39	+8	30.23	— I
I	1 51.36	+4	36.28			+20		+ 8		+8		+ 3
1:			36.64		62.37	+ 8	36.39	+ 9	66.00	+6		+ 6
ı	3 51.64	-3	37.00	+ 9	63.01	— 6	36.73	+ 9	66.31	+3	30.63	+ 8
1.			37-37	+ 6		— 1 8	37.07	+ 7	66.61	0		+9
1	5 51.90		37-73	+ 2		-2 6		+ 3	66.91	-4	30.92	+ 7
1	6 52.02	8	38.10	— 2	64.86	-30	37.76	- I	67.21	6		+ 5
sec δ, tg	δ +1	3.63	+13.	59	+49	.49	+49.	48	+12	.27	+12	.23

	1	511	Hev. C	ephei 5 [™]	.2.	ı lle	ev. Dr	aconis 4'	"·3·	εUrs	ae mi	inoris 4"	.2.
1913		AR.	« Gl.	Dekl.	∝ G1.	AR.	∝ Gl.	Dekl.	Œ GI.	AR.	« Gl.	Dekl.	Gl.
		7 ^h °	in s o.o1	+87° 11′	in 	9 ^h 24 ^m	in s o.or	+81°42′	in 	16 ^h 54 ^m	in o.o.	+82°11′	in o.or
Aug. 1	0	7.04	- 8	11.52	- 4	46.51	— 3	42.74	+ 2	52.32	+1	0.89	+5
r	ı	7.40	— 5	11.26	- 7	146.54	-3	42.40	- 2 - 6	52.16	0	1.00	+8
I	2	7.76	_ I	11.00	- 9	46.57	-3	42. 05 41. 70	- 9	51.99	2	1.10	+8
I	3	8.13	+ 3	10.75	-10	46.64	0	41.35	_ I 0	51.82	-4	1.20	+6
1	4	8.50	+ 8	10.50	- 8	46.68	+1	41.00	-10	51.65	5	1.29	+4
I	5	8.87	+11	10.25	5	46.72	+3	40.65	— 7	51.48	- 5	1.38	0
	6	9.25	+12	10.00	_ I	46.76		40.29	<u> </u>	51.31	-4	1.47	-4
I	7	9.63	+11	9.76	+ 3	46.81	+4	39.94	0	51.14	-3	1.55	-7
I	8	10.02	+ 7	9.52	+ 7	46.86		39.59	+ 5	50.97	$-\mathbf{I}$	1.63	-8
1	9	10.42	+ 3	9.28	+ 9	46.91	+2	39.24	+ 8	50.80	+1	1.70	-8
2	0	10.83	— 3	9.04	+ 9	46 .9 6	0	38.89	+ 9	50.63	+3	1.76	- 7
2	ıΙ	11.23	— 8	8.81	+ 8	47.01	-2	38.54	+9	50.46	+4	1.82	— 3
	2	11.64	-13	8.58	+ 5	47.06	-3	38.19	+ 8	50.28	+5	1.88	+1
	3	12.06	-14	8.36	+ 1	47.12		37.84	+ 5	50.10	+4	1.93	+5
2	4	12.48	-13	8.14	- 3	47.18	-5	37.49	+ 1	49.92	+3	1.98	+8
	5	12.90	-10	7.92	– 6	47.24	<u>-4</u>	37.14	- 3	49.75	+2	2.02	+9
	6	13.33	— 6	7.71	- 7	47.31	-3	36.80	- 5	49.57	0	2.05	+9
	7	13.76	— I	7.50	- 7	47.38		36.45	- 6	49.39	-2	2.08	+7
	8	14.20	+ 5 + 8	7.29	- 5	47.45		36.11	- 6	49.21	-3	2.11	+4
	9	14.64		7.09	- 2	47.52		35.77	- 4	49.03	-3	2 .13	0
-	30	15.09	+10	6.89	+ 1	47.59		35.42	- I	48.85	-3	2.15	-4
Sept. 3	31	15.54	+10	6.69	+ 5	47.67		35.08	+ 2	48.67	-2	2.16	-7
верь.	1 2	15.99 16.45	+ 7	6.50 6.31	+ 7 + 8	47.74	_	34.74	+ 5	48.49 48.31	+1	2.1 6	$-9 \\ -8$
	3	16.91	+ 3 - I	6.13	+ 7	47.82 47.90	1	34.40	+7		+2	2.15	-6
				i								1	
	4	17.38 17.85	$-5 \\ -8$	5.94	+ 5 + I	47.98 48.07		33.72	+ 6		+3	2.14	-3
	5	18.32	-8	5.76 5.58	+ I - 3	48.16		33.38 33.04	+ 3		+3+2	2.13	$+1 \\ +4$
	7	18.80	6	5.4 I	- 6	48.25		32.71	- 5		0		+7
	8	19.28	— 3		- 9	48.34		32.37	- 8			2.05	+8
	9	19.76	+ 2	5.09	_IO			32.04	IC				+7
]	9 : 10	- '			- 9			31.71	IC			Al .	+5
	II	20.74			- 6	48.62	+2	31.38					+1
	12	21.24			— 3		+3	31.05					-3
1	13	21.74		11	+ 2		+4	30.72	- 1			0	-6
	14	22.24	+10	4.34	+ 5	48.02	+4	30.40	+ 2	46.14	_2	1.75	-8
	15	22.74					+3	30.08				, ,	-9
	16	23.24			+ 9		+1	29.76	+ 9			11	-7
sec δ, tg	g δ	+2	0.36	-1-20			5.94		5.86	+7	7.35	+7	28

-177	ð Ursae n	ninoris 4	·3.	λUı	sae m	inoris 6°	.8.	761	Drace	onis 6 ^m .c	
1913	AR. C1.	Dekl.	Cil.	AR.	(i).	Dekl.	Gl.	AR.	Gl.	Dekl.	(H.
	18 ^h 0 ^m in	+8 6° 36′	in 01	19 ^h 6 ^m	in s o.oi	+89°0′	in "0.01	2 0 ^{l1} 48 ^m	in 8 10.0	+82° 12'	in 0.01
Aug. 10	22.16 + 5	56.37	.+-5	96.15	+21	44.25	+ 4	61.09	+3	39.85	+
11	21.82 + 2	56.57	+-8	95.22	+14	44.52	+ 7	61.05	+3	40.21	+
12	21.47 - 2	56.76	+9	94.27	+ 2	44.80	+ 9	61.01	+-2	40.57	+
13	21.12 — 6	56.95	+-8	93.30	-12	45.07	+10	60.96	0	40.93	+1
14	20.76 - 9	57.14	+6	92.32	24	45.34	+ 8	60.91	-1	41.29	+1
15	20.40 -11	57.32	+-2	91.32	-33	45.60	+ 5	60.86	3	41.65	+-
16	20.04 -10	57.50	-2	90.30	36	45.86	+ 1	60.81	-4	42.01	+
17	19.68 — 8	57.67	5	89.27	-32	46.12	— 3	60.75	-4	42.37	
18	19.31 - 4	57.84	8	88.23	-22	46.38	- 7	60.69	-4	42.72	_
19	18.94 0	58.01	-9	87.17	- 8	46.63	- 9	60.63	-3	43.08	
20	18.56 + 5	58.17	8	86.09	+ 9	46.88	- 9	60.57	1	43.43	_
21	18.18 + 9	58.33	-5	85.00	+-24	47.13	- 7	60.50	+1	43.78	
22	17.80 +11		-2	83.89	+35	47.37	- 4	60.43	+3	44.13	_
23	17.42 +12	0.0	+2	82.77	+40	47.61	_ I	60.36	+5	44-47	
24	17.03 +10	58.77	+6	81.64	+38	47.85	+ 3	60.29	+5	44.82	
25	16.64 + 7	58.91	+-8	80.49	+30	48.08	+ 6	60.22	+-5	45.16	+
26	16.25 + 2		+9	79.33	+17	48.31	+ 8	60.14	+4	45.50	+
27	15.85 - 2		+8	78.15	+ 2	48.54	+ 8	60.06	+2	45.84	+
28	15.45 - 5		+5	76.96	I2	48.76	+ 6	59.98	0	46.18	+
29	15.05 - 7		+1	75.76	-22	48.98	+ 3	59.89	-2	46.52	+
30	14.64 - 7	59-55	-3	74.54	-27	49.20	_ I	59.80	-3	46.85	4-
31	14.23 - 6		-6	73.31	—2 6	49.41	— 5	59.71	-4	47.18	-
Sept. 1	13.82 — 3	59.77	8	72.07	-19	49.62	- 7	59.62	-4	47.51	_
2	13.41	0	-9	70.81	- 8	49.82	- 8		-2	0	_
3	13.01 + 4		-7	69.54	+ 5	50.02	- 8		1	48.17	-
4	12.60 + 6	60.07	-4	68.27	+15	50.22	_ 6	59-33	+1	48.49	_
5	12.18 + 7		-I	66.99	+22	50.41	_ 2		+2	0.0	
6	11.76 + 6	60.25	+3	65.69	+-22	50.60	+ 2			49.13	-
- 7	11.34 + 3	60.33	+7	64.38	+17	50.78	+ 6				+
8	10.92		+-8	63.06	+ 7	50.96	+ 8				+-
9	10.50 - 4	60.47	+9	61.73	- 7	51.14	+10	58.80	+1	50.07	+
10	10.08 8		+7	60.39		51.31	+ 9	_		50.38	-
11	9.65 —10		+4		-31	51.48	+ 6				-+-
12	9.23 —11		0	57.68			+ 3				+
13	8.80 — 9		-4	56.31			- 1				+
14	8.37 — 6	60.76	-7	54.93	-27	51.96	- 5	58.23		51.57	-
15	7.93 - 2		9	53.54			- 8				_
16			8		+ 2		- 9	_		_	
sec à, tg à	-1-16.94	+16	TO	-1-s	8.08	-1-58	3.08	-1	7.38	-1-7	7.2 T

TOTA	43 1	tev. c	ephei 4 ^m	.3.	αUi	rsae m	inoris 2"	.0.	G	r. 7	50 6™.8	
1913	AR.	€ Gl.	Dekl.	Œ Gl.	AR.	€ G1.	Dekl.	Gl.	AR.	GI.	Dekl.	GI.
	o ^h 56 ^m	in 6 0.01	+85° 47′	in 01	1 ^b 29 ^m	in 8 0.01	+88° 50'	in 	4 ^h 9 ^m	in e 0.01	+85° 19'	in 0.01
Sept. 16	52.02	-8	38.10	- 2	4.86	—3 0	37.76	_ ı	7.21	-6	31.07	+ 5
17	52.14	-7	38.47	— 6	5.45	-27	38.11	- 5	7.51	8	31.23	+ 1
18	52.26	-4	38.85	— 9	6.02	-19	38.46	8	7.81	8	31.39	- 3
19	52.37	—I	39.22	-10	6.58	- 7	38.81	-10	8.11	-6	31.55	- 7
20	52.48	+3	39.60	-10		+ 6	39.17	-10	8.41	-4	31.72	— <u>ç</u>
2.1	52.58	+-6	39.97	— 8	,	+17	39.53	- 9	8.71	— I	31.89	10
22	52.68	-1-7	40.35	5		+24	39.89	6	9.00	+-2	32.07	9
23	52.78	+7	40.73	— I	8.69	+25	40.25	_ 2	9.29	+4	32.25	- 6
24	52.87	+5	41.11	+ 3	9.18	+21	40.62	+ 2	9.58	+6	32.43	- 2
25	52.96	+3	41.49	+ 5	9.65	+12	40.98	+ 5	9.87	+-5	32.62	+ 2
26	53.04	-1	41.87	+ 7	10.11	+ 1	41.35	+ 7	10.15	+3	32.81	+ 5
27	53.12	-4	42.25	+ 6	10.56	-12	41.72	+ 7	10.44	+1	33.01	+ 8
28	53.20	-6 0	42.64	+ 5	10.99	-21	42.09	+ 6	10.72	-I	33.21	+ 8
29	53.27	$-8 \\ -7$	43.02	+ 2 - I	11.41	-27	42.46 42.84	+ 3	11.00	_4 r	33.42 33.63	+ 7
30	53.33		43.41			-27				-5		
Okt. 1	53.39	-5	43.79	- 4	12.19	-21	43.21	3	11.55	<u>-6</u>	33.84	+ 1
2	53.45	-2	44.18	— 6 — 6	12.56	-10	43.59	56	11.82	-5	34.06	— 2
3	53.50	+1	44.57		12.91	+ 2 + 16	43.97		12.09	—2 — T	34.28	_ 5
5	53.55 53.60	+7	44.96 45.35	- 4 - 2	13.25	+26	44·35 44·73	— 5 — 3	12.63	+I +4	34.5° 34.73	- 7 - 7
			i						_			
6	53.64 53.68	+8 +8	45·74 46.13	+ 2	13.88	+31	45.12	0	12.89	+6 +8	34.96	6
7 8	53.71	+6	46.52	+ 5 + 8	14.17 14.45	+31 +24	45.50 45.88	+ 4 + 7	13.15 13.41	+8	35.20 35.44	— 3 — 1
9	53.73	+2	46.90	+ 9	14.71	+13		+ 9	13.67	+7	35.68	+ 5
-	53.75	I	47.29	+ 9	14.95	0	46.65	+ 9	13.93	-+5	35.93	+ 7
11	53.77	-5	47.68	+7	15.18		_	+ 8	14.18	+1	36.18	+ 9
	53.78	-7	48.07	+ 4	15.39	13 24		+ 5	14.43	-2	36.43	+ 8
	53.79	_8	48.45	0	15.59	-29	_	+ I	14.68	-5	36.69	+ 6
	53.80	-7	48.84	- 4	15.77	2 8	48.20	- 3	14.92	-7	36.95	+ 3
	53.80	-5	49.22	_ 8	15.93	-22	48.59	— 7	15.16	_ <u>8</u>	37.21	_ ī
16	53.80	-2	49.61	— 1 0	16.07	-12	48.97	-10	15.40	-7	37.48	— <u>5</u>
	53.79	+1	49.99	_ I 0		+ 1	49.36	10	15.63	-5	37.75	- 8
	53.77	+5	50.38	9			49.75	— 9			38.02	—1 0
	53-75	+7		- 6	16.40		50.14	- 7	16.09		38.30	— 9
	53.73	+7	51.15	— 2	16.48		50.52	— 3	16.32	+3	38.58	- 7
2.1	53.70	+6	51.53	+ 1	16.54	23	50.91	0	16.54	+5	38.86	— 4
	53.67	+4		+ 5	16.58			+ 4	16.76		39.14	C
	53.63	+1		+ 6	16.61			+ 6	16.98			+ 4
				-								

		51 F	Iev. C	ephei 5 ^m .	2.	т Но	ev. Dra	aconis 4	.3.	εUrsa	ie mi	noris 4 ^m	.2.
1913		AR.	Œ Gl.	Dekl.	∝ Gl.	AR.	C Gl.	Dekl.	℃ G].	AR.	Œ Gl.	Dekl.	Gl.
		7 ^h °	in	+87° 11′	in	9 ^h 24 ^m	in	1-81° 42′	in	16 ^h 54 ^m		+82° 10′	in
Sept. 1	₁₆	23.24	0.01 — I	4.07	0.01 + 9	49.14	I	29.76	o.oi + 9	45.77).OI +2	61.62	0.01
	17	23.75	– 6	3.94	+ 8	49.25	_T	29.44	+ 9	45.59	+4	61.54	5
	18	24.26	11	3.81	+ 6	49.36	− 3	29.12	+ 8	45.41	+5	61.46	I
	19	24.77	-14	3.69	+ 3	49.47	-4	28.81	+ 6	45.23	+5	61.37	+3
	20	25.28	-14	3.57	- I	49.59	-5	28.51	+ 2	45.05	+4	61.28	+7
:	21	25.80	<u>-12</u>	3.46	- 5	49.70	-4	28.20	т	44.87	+2	61.18	+9
:	22	26.32	_ 8	3.35	- 7	49.82	-3	27.89	- 4	44.69	+1	61.08	+9
2	23	26.84	— 3	3.25	— 7	49.94	-2	27.59	- 6	44.51	I	60.97	+8
:	24	27.36	+ 2	3.15	- 6	50.06	, o	27.29	6	44.33	-2	60.86	+5
:	25	27.88	+ 7	3.06	- 4	50.18	+2	27.00	— 5	44.16	-3	60.75	+1
:	26	28.41	+10	2.97	0	50.31	+3	26.70	- 2	43.99	-3	60.63	
:	27	28.94	+10	2.88	+ 4	50.44	+4	26.41	+ 1	43.81	2		
-	28	29.47	+ 8	2.80	+ 6	50.57	+4	26.12	+ 4	43.63	I	60.37	8
	29	30.00	+ 5	2.73	+ 8	50.70	+2	25.83	+ 6	43.46	+1	60.23	
	30	30.53	+ 1	2.66	+ 8	50.83	+1	25.55	+ 7	43.28	+2	60.09	
Okt.	r	31.06	- 4	2.59	+ 6	50.97	0	25.27	+ 7	43.11	+3	59.95	-
	2	31.59	- 7	2.53	+ 3	51.11	-2	24.99	+ 5	42.94	+3	59.80	
	3	32.12	- 8	2.47	- I	51.24	-3	24.72	+ 1	42.77	+-2	59.64	+
	4	32.66	- 7	2.42	- 5	51.38	-3	24.45	- 3	42.60	+1	59.48	+
	5	33.20	- 4	2.37	- 8	51.52	-3	24.18	- 7	42.43	-1	59.32	+
	6	33.74	0	2.33	-10	51.66	I	23.92	- 9	42.27	-2	1 37 7	+
	7	34.28	+ 5	2.29	- 9	51.80	0	23.66	-10	42.10	4	58.97	4
	8	34.82	1	2.25	8	51.94	+2	23.40	- 9	41.94	-5		4-
	9	35.36			- 4	52.09	+3	23.15	- 7		-5		
	10	35.89	+13	2.20	0	52.24	+4	22.90	— 3	41.61	-4		
	11	36.43			+ 4		+4	22.65	+ 1	1	-3		
	12	36.97			+ 7	1	+3	22.41	+ 5		1		-
	13	37.51			+ 9		+2	22.17	+ 8		+2	J. J	-
	14	38.04			+ 9	1 -		21.93	+ 9		+3		-
	15	38.58	— g	2.16	+ 7	1		21.69	+ 5		+4		-
	16	39.12			+ 4			21.46	+ 7		+5		+
	17	-		.	C	53.31	1		+ 4		+4		+
	18				<u> </u>					1 . 2	+3		+
	19	1	-10	1)		53.63			-		+:		1
	2 0	1		2.24	- 7	53.79	-3	1				56.31	
	21	1 '			- 7		—I				-2	11 -	
	22		+ 5		- 5					1 0 / / /			
	23	42.86	+ 9	2.34	- 1	54.27	+3	19.98	4	39.63	-	55.60	-
sec δ, t	2		20.35			-	5.93	+6	0/	+7		+7	-0

171	6 Urs	ae mi	noris 4 ⁿ .	3.	λUrs	ae mi	noris 6 ^m	.8.	76	Dra	conis 6 ^m .	0.
1913	AR.	Œ Gl.	Dekl.	Œl.	AR.	Gl.	Dekl.	G1.	AR.	CGL.	Dekl.	GI.
	17 ^h 59 ^m	in s	+86° 36′	in 0.01	19" 5"	in 8	4-89° 0′	in 0.01	20h 48m	in 0.01	+82° 12′	in ".
Sept. 16	67.50	+ 3	60.84	-8	112.14		52.26	9	57.99	-2	52.15	_
17	67.06	-1- 7	60.87	-7	110.73	i	52.40	-8	57.87	O	52.43	
18	66.63	+10	60.90	3	109.32		52.54	6	57-74	+3	52.71	_
19	66.19	+11	60.92	+1	107.90	+39	52.67	2	57.61	+-4	52.99	_
20	65.76	+11	60.94	+4	106.47	+40	52.80	+2	57.48	+-5	53.26	
2,1	65.32	+ 8	60.95	+7	105.04	-1-34	52.93	+-5	57.35	+5	53.53	+
22	64.89	+ 4	60.96	+9	103.60		53.05	+7	57.22	+-4	53.80	+
23	64.45	0	60.97	1-8	102.15		53.17	+8	57.08	+2	54.06	-
24	64.02	- 4	60.97	4-6	100.70		53.28	+7	56.94	0	54.32	+-
25	63.58	- 6	60.96	+3	99.24	-18	53.38	-+4	56.80	1	54.58	+
2 6	63.15	- 7	60.95	-1	97.77	-25	53.48	0	56.66	-3	54.84	+
27	62.71	6	60.93	5	96.30	-27	53.58	-3	56.52	-4	55.09	
28	62.27	- 4	60.91	-8	94.83	22	53.67	-6	56.38	-4	55.33	
29	61.83	- I	60.88	-9	93.35	12	53.76	-8	56.24	-3	55.57	
30	61.40	+ 3	60.85	-8	91.87	0	53.84	8	56.09	2	55.81	_
Okt. 1	60.96	-1- 5	60.82	-6	90.38		53.92	-7	55.94	0	56.04	_
2	60.53	+ 7	60.78	-2	88.89		53.99	-4	55.79	+-2		
3	60.09	+ 6	60.73	+2	87.40		54.06	0	55.64	+-3	56.49	
4	59.66	+ 4	60.68	+5	85.90		54.12	+4	55.49	+3	56.71	+-
5	59.22	I	60.62	+-8	84.40		54.18	+8	55.34	1-3	56.93	- -
6	58.79	3	60.56	1-9	82.89	1	54.23	1-9	55.18	+2	57.14	- -
7	58.36	— 7	60.49	4-8	81.39	15	54.28	+9	55.03	0	57-35	
8	57.93	IO	60.42	+5	79.88	-27	54.32	+7	54.87	- 2	0,00	+1
9	57.50	I I	60.34	2	78.37	35	54.36	-+-4	54.71	-3	57.74	
10	57.07	-10	60.26	-2	76.86	-37	54.40	0	54-55	-4	57.93	
11	56.65	— 8	60.18	-6	75.35	-32	54.43	-4	54.39	-4	58.12	
12	56.22	- 4	60.09	8	73.84	-20	54.45	-7	54.23	-4	58.30	_
13	55.80	+ 1	60.00	<u>-9</u>	72.33	5	54.47	<u>-9</u>	54.07	- 2	58.48	
14	55.38	+ 6	59.90	-7	'		54.48	9	53.90	0	58.65	
15	54.96	+ 9	59.79	-5	69.31		54.49	-7	53.74	+2	58.82	
16	54.54		59.68	I	67.80		54.49	-4	53.57	+3	58.98	-
17	54.13	11	59.56	-1-3	66.29		54.49	0		-1-5		
18	53.72	+ 9	59.44	+6	/		54.48	+-4		+5		
19 20	53.31 52.90	+6 + 2	59.31 59.18	+8 +9	63.28 61.78		54.46 54.44	+7 +8	1	+4 +3		+
21			59.04	+7	60.28			+7				
22	52.50	— 2 — r	58.90		58.78		54.42			- -I	59.71	
23	52.10 51.69	$\frac{-5}{-7}$	58.76	1-4	57.29		54.39 54.36	+5 +2	52.57 52.40	— I —2		+
sec δ , tg δ	-4-16.	n s	-+ 16.9	12	+ 58.	17	-1 -58.	16	+7.3	8	+7	21

191	-			lephei 4"	.J.		0000 111	inoris 2"		,	ir. 7	50 6 ^m .8	•
	.3	AR.	∝ G1.	Dekl.	Œ Gl.	AR.	€1.	Dekl.	∝ Gl.	AR.	Gl.	Dekl.	Œ GI.
		o ^h 56 ^m	in • •.01	1-85° 47'	ni " 10.0	1 29 m	in s 0.01	+88° 50′	in 0.01	4 ^h 9 ^m	in 8 0.01	+85° 19′	in "OOI
Okt.	23	53.63	- +I	52.29	+ 6	16.61	+ 5	51.69	+ 6	16.98	+4	39.43	+ 4
	24	53.59	-3	52.67	+ 7	16.62	- 7	52.07	+ 7	17.19	+2	39.72	+ 7
	25	53.54	<u>_6</u>	53.05	+ 5	16.61	-18	52.46	+ 6	17.40	—I	40.01	- 8
	26	53.49	7	53.42	+ 3	16.59	26	52.84	+ 4	17.60	-3	40.30	+ 8
	27	53.44	<u>-8</u>	53.79	0	16.55	-28	53.23	+ 1	17.80	-5	40.60	+ 6
	28	53.38	<u>-</u> 6	54.16	- 3	16.49	-24	53.61	– 2	18.00	-6	40.90	+ 3
	29	53.32	-3	54-53	- 6	16.41	-15	54.00	— 5	18.19	5	41.20	— 1
	30	53.25	0	54.90	6	16.32	- 3	54.38	6	18.38	3	41.51	- 4
	31	53.18	+3	55.27	- 5	16.21	+10	54.76	6	18.57	$-\mathbf{I}$	41.82	- 7
Nov.	I	53.10	+7	55.63	- 3	16.08	+22	55.14	- 4	18.75	+3	42.13	- 7
	2	53.02	+-8	55.99	0	15.93	+29	55.52	— І	18.93	+5	42.44	- 6
	3	52.93	+-8	56.35	+ 4	15.77	+32		+ 3	19.10	-1-8	42.76	- 4
	4	52.84	+7	56.71	+ 7	15.59	+27		+ 6	19.27	+8	43.08	C
	5	52.74	+4	57.07	+ 9	15.39	+18	56.64	+8	19.44	+8	43.40	+ 3
	6	52.64	0	57.42	+10	15.17	+ 5	57.01	+10	19.61	+6	43.72	+ 7
	7	52.54	-3	57.77	+ 8	14.94	8	57.38	+ 9	19.77	+3	44.04	+ 9
	8	52.43	-6	58.12	+ 6	14.69	-20	57.75	+ 6	19.92	I	44.36	+ 9
	9	52.32	-8	58.46	+ 2	14.42	-27	58.12	+ 3	20.07	-4	44.69	+ 7
	10	52.20	-8	58.80	- 2	14.13	-29	58.49	— I	20.22	6	45.02	+ 4
	11	52.08	-6	59.14	⊸ 6	13.83	-25	58.85	— 5	20.36	-8	45.35	C
	12	51.95	-3	59.48	- 9	13.51	16	59.21	- 9	20.50	7	45.68	- 4
	13	51.82	0	59.81	-10	13.17	- 4	59.56	-10	20.63	-6	46.02	- 7
	14	51.69	+3	60.14	— 1 0	12.82	+ 8	59.92	IO	20.76	-3	46.35	- 9
	15	51.55	+6	60.47	- 7	12.45	+19	60.27	– 8	20.89	0	46.69	10
	16	51.41	+7	60.79	− 4	12.06	+24	60.62	- 5	21.01	+2	47.02	— 8
	17	51.26	+7	61.11	0	11.66	25	60.97	— I	21.12	+4	47.36	— 5
	18	51.11	+5	61.43	+ 3	11.24	+20		+ 2		+5	47.70	- I
	19	50.95	+2	61.74	+ 6	10.80	+10		+ 5	21.34	+4	48.04	+ 3
	20	50.79	-I	62.05	+ 7	10.34	- 2		+ 7	21.44	+3	48.38	+ 6
	21	50.63	-5	62.35	+ 6	9.87	-14	62.33	+ 7	21.54	0	48.72	-⊢ 8
	22	50.46	-7	62.65	+ 4	9.38	-23		-+ 5	21.63	-2	49.06	-⊢ 8
	23	50.29	-8	62.95	+ 1	8.88	-28	//	+ 2	,	-4	., .	+ 7
	24	50.12		63.24	- 2	8.36		63.32	— I	21.80			+ 4
	25		-5	63.53	- 5	7.82		63.64	- 4	21.88	6	50.10	С
	26	49.76	-1	63.82	6	7.27		63.96	— 6	21.95	-4	50.44	— 3
	27	49.57	+2	64.10	— 6	6.70		64.27	- 6	22.02	-2	50.79	- 6
	28	., .	+6		- 4	6.11			- 5	22.08	+I	51.13	
	29	49.19	+8	64.65	— I	5.51	27	64.89	2	22.14	+4	51.48	- 7
_	g õ												

707		51 1	Iev. C	ephei 5 ^m	.2.	I He	ev. Dr	aconis 4"	°-3-	εUrs	ae mi	noris 4 ^m	.2.
191	3	AR.	Œ Gl.	Dekl.	GI.	AR.	∝ Gl.	Dekl.	(il.	AR.	Gl.	Dekl.	GI.
		7 ^h ° m	in o.or	+87° 11′	in o.or	9 ^h 24 ^m	in 8 0.01	+81°42'	in 0.01	16 ^h 54 ^m	in 8 0.01	+82° 10′	in 5.01
Okt.	23	42.86	+ 9	2.34	I	54.27	+3	19.98	— 4	39.63	-3	55.60	
	24	43.39	+10	2.38	+ 2	54.44	+3	19.78	0	39.49	-2	55.35	-
	25	43.92	+ 9	2.43	+- 5	54.61	+4	19.59	+ 3	39.35	-1	55.10	
	26	44.44	+ 6	2.49	+ 8	54.78	+3	19.40	+ 6	39.21	0	54.85	-
	27	44.97	+ 2	2.55	+ 8	54.95	+2	19.22	+ 7	39.07	+2	54.59	
	28	45.49	2	2.62	+ 7	55.12	0	19.04	+ 7	38.94	+3	54.33	_
	29	46.01	6		+ 4	55.29	-1	18.87	+ 6	38.81	+3	54.06	_
	30	46.53	8	2.77	+ 1	55.46	-2	18.70	+ 3	38.68	+3	53.79	+
	31	47.05	8	2.85	— 3	55.63	-3	18.54	- I	38.55	+2	53.52	+
Nov.	1	47.56	- 6	2.93	- 7	55.80	-3	18.38	5	38.43	0	53.25	+
	2	48.08	_ 2	3.02	- 9	55.97	-2	18.23	_ 8	38.31	-2	52.97	+
	3	48.59	1	-	-10	56.14	-I	18.08	-10		-3	52.68	+
	4	49.10	+ 7		- 9	56.32	+1	17.94	_IO			52.39	+
	5	49.60	+11		6	56.50	+3	17.80	_ 8		-5	52.10	+
	6	50.10	+13	II .	- 2	56.67	+4	17.67	— 5	37.84	5	51.80	-
	7	50.60	+12	3.55	+ 2	56.85	+4	17.54	I	37.73	- 3	51.50	_
	8	51.09	+ 9		+ 6		+4	17.42	+ 3		-1	51.19	_
	9	51.58	+ 4		+ 8	57.20	+3	17.30	+ 7		+1	50.88	
	10	52.07	- 2	II.	+ 9	57.38	+1	17.19	+ 9		+2	1 0	-
	11	52.55	 - 7	4.05	+ 8	57.56	-1	17.08	+ 9	37-30	+4	50.27	-
	12	53.03	—12	4.19	+ 5	57-74	-3	16.98	+ 8	37.20	+5	49.95	
	13	53.51	-14	'	+ 2		-4	16.89	+ 5				+
	14	53.98	-14		_ 2		<u>-5</u>	16.80	+ 1				+
	15	54.45	-11		一 5	58.28	-4	16.71	<u> </u>	1 -		-	-+
	16	54.91	- 7	4.79	- 7	58.46	-3	16.63	- 5	36.83	C	48.66	+
	17	55-37	_ 2	4.95	- 7	58.64	_I	16.55	- 6	36.74	I	48.33	+
	18	55.83		.,,,	- 6			16.48	_ 6				+
	19	56.28			<u> </u>			16.42	_ 4	1			-
	20	56.73	- !-I C	11	+ 1			16.36	- 2				-
	21	57.17	+ 9	5.64	+ 4			16.31	+ 2	36.43			-
	22	57.61	+ 7	5.83	+ 7	59.54	+3	16.26	+ 5	36.36		46.65	_
	23		+ 4		+ 8				+ 5			11	
	24	58.47	— I	11 -	+ 8	27 /			+ 5				-
	25	58.89		1)	+ 6	60.07							-
	26	59.30		6.61	+ 2								
	27	59.71	8	6.82	2	60.43	-3	16.11					+
	28	60.11		[]	- 6			_		_		-	1
	29	60.51		11	_ 8			(0	_				-
				' '									1

701		ð Ui	rsae m	inoris 4	.3·	λU	rsae m	inoris 6	".8.	76	Drac	onis 6 ^m .	Э.
191	13	AR.	Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	CGI.	AR.	∝ Gl.	Dekl.	Gl.
		17 ^h 59 ^m	in s o.oɪ	+86° 36′	in 	19 ^h 5 ^m	in 8 0.01	4-89° 0'	in 0.01	20 ^h 48 ^m	in 0.01	+82° 12'	in "0.01
Okt.	23	51.69	- 7	58.76	0	57.29	-23	54.36	+2	52.40	-2	59.97	
	24	51.29	- 7	58.61	-4	55.80	-26	54.32	2	52.23	3	60.10	+
	25	50.90	- 5	58.45	-7	54.32	24	54.27	- 5	52.06	-4	60.22	
	2 6	50.50	— 2	58.29	<u>-9</u>	52.84	-15	54.22	-8	51.88	-3	60.33	-
	2 7	50.11	+ 1	58.13	<u>-9</u>	51.36	- 4	54.17	<u>-9</u>	51.71	-2	60.44	-
	28	49.72	+ 4	57.96	-7	49.89	+ 8	54.11	8	51.54	0	60.54	_
	2 9	49.34	+ 6	0,17	-4	48.42	+18	54.04	-5	51.36	$+\mathbf{I}$	60.64	_
	30	48.96	+ 7	57.61	0	46.96	+23	53.97	— I	51.19	- ⊢2	60.73	-
N .T	31	48.59	+ 5	57.43	+4	45.51	+22	53.89	+3	51.01	+3	60.81	
Nov.	1	48.21	+ 3	57.24	+ 7	44.06	+15	53.81	+6	50.84	+3	60.89	+-
	2	47.84	— I	57.05	+9	42.62	+ 4	53.73	+9	50.66	+2	60.96	+
	3	47.48	- 5	56.86	+8	41.19	-10	53.64	+9	50.49	+I	61.03	I
	- 4	47.12	— 9	56.66	+6	39.77	-23	53.54	+8	50.31	—I	61.10	+1
	5	46.76	-11	56.46	+3	38.35	-33	53-44	+-6	50.14	-3	61.16	+-
	6	46.41	-11	56.25	—I	36.94	-37	53.33	+2	49.97	-4	61.21	+
	7	46.06	- 9	56.04	5	35.54	-35	53.22	2	49.79	-4	61.26	+
	8	45.72	– 6	55.82	-7	34.15	-26	53.11	6	49.62	-4	61.30	
	9	45.38	— I	55.60	-9	32.77	-12	52.99	-8	49.44	-3	61.33	-
	10	45.04	+ 4	55.37	8	31.40	+ 4	52.86	−9 −8	49.26	-2	61.36	-
	11	44.71	+ 8	55.14	<u>-6</u>	30.04	+20	52.73		49.09	+1	61.38	_
	12	44.38	+11	54.91	-3	28.69	+32	52.59	-5	48.91	+3	61.40	_
	13	44.06	+11	54.67	+1	27.35	+39	5 2 .45	—I	48.74	+4	61.41	_
	14	43·74 43·43	+10	54.43 54.18	+5 +8	26.03	+39	52.30	+2 +6	48.56 48.39	+5 +5	61.42	_
	15 16	43.12	+ 7 + 3	53.93	+9	24.71 23.40	+32 + 20	52.15 52.00	+8	48.22	+4	61.41	+
								_					
	17 18	42.82	- I	53.68	+8	22.11	+ 5	51.84	+8	48.04 47.87	+-2	61.40 61.38	+
		42.52	- 4 - 7	53.42 53.16	+5 +2	19.57	- 9 - 2 ○	51.67 51.50	+6 +3	47.70	O 2	61.36	+
	19 20	41.94	$-\frac{7}{7}$	52.89	-2	18.32	-25	51.32	~3	47.53	-3	61.33	+
	21	41.66	_ 6	52.62	-6	17.08	-25	51.14	4	47.36	4	61.29	<u> </u>
					-8	15.85		50.96		47.19		61.25	
	22	41.38	- 3 0	52.35 52.08	<u>-9</u>	14.64	—19 — 8	50.90	-7 - 8	47.02	—4 —3	61.20	_
	24	40.85		51.80	-8	13.45		50.58	8	46.85		61.15	
	25	40.59		51.52	5	12.27			6	46.69	0	61.09	
	2 ,6	40.34		51.23	-ī	11.11		50.18	— 3	46.53		61.03	_
	27		+ 6	50.94	+3	9.96		49.97	+1	46.36			
	28	39.85		50.65	+6		+19	49.76	+5	46.20			+
	29	39.61	0	50.35	+-8	7.71		49.54	+8	46.03			+
			ŀ	- 00									
sec ò, t	ora	+16	.04	+16.	οт	-1-5	8.15	-1-58	.14	+7.3	20	+7.	22

		43 I	Iev. C	ephei 4 ^m	3.	αUr	sae m	inoris 2 ^m	.0.	G	r. 75	so 6 ^m .8.	
191	3	AR.	Œ GJ.	Dekl.	Œ Gl.	AR.	Cil.	Dekl.	Œ GJ.	AR.	Gl.	Dekl.	Œ Gl.
		o ^h 56'''	in 8 0.01	+85°48′	in 0.01	1 28 m	in 0.01	+88° 51'	in 0.01	4 ^h 9 ^m	in 6 0.01	+85° 19′	in
Nov.	2 9	49.19	+-8	4.65	I	65.51	+27	4.89	_ 2	22.14	+4	51.48	_ '
	30	48.99	+8	4.92	+ 2	64.89	+32	5.20	+ 1	22.20	+7	51.82	_
Dez.	I	48.79	+8	5.18	+ 6	64.26	+30	5.50	+ 5	22.25	+8	52.16	
	2	48.58	+5	5.44	+ 9	63.62	+22	5.80	+ 8	22.30	+8	52.51	+
	3	48.37	2	5.69	10	62.96	11	6.09	+ 9	22.34	+7	52.85	+
	4	48.16	-2	5.94	+ 9	62.28	— 3	6.38	+ 9	22.37	+4	53.20	+
	5	47.94	-5	6.18	+ 7	61.59	-15	6.66	+ 8	22.40	$+\mathbf{I}$	53.54	+
	6	47.72	-7	6.42	+ 3	€0.88	-25	6.94	+ 4	22.42	3	53.88	+-
	7	47.50	-8	6.65	— I	60.16	-29	7.21	0	22.44	-5	54.22	+
	8	47.28	-7	6.88	- 5	59.43	-27	7.48	4	22.45	-7	54.56	+
	9	47.05	-4	7.10	- 8	58.68	-20	7.75	- 7	22.46	-7	54.90	_
	10	46.82	I	7.32	-10	57.92	- 9	8.or	10	22.46	-6	55.24	_
	11	46.59	+2	7.53	10	57.14	+ 4	8.26	-10	22.46	-4	55.58	-
	12	46.35	+5	7.74	_ 8	56.35	+15	8.51	— 9	22.46	I	55.92	I
	13	46.11	+7	7.94	— 5	55.55	+23	8.76	- 6	22.45	$+\mathbf{I}$	56.25	
	14	45.87	+7	8.14	- 2	54.73	+25	9.00	— 3	22.43	+4	56.58	_
	15	45.62	+6	8.33	+ 2	53.91	+22	9.23	+ 1	22.41	+5	56.91	_
	16	45.37	+3	8.51	+ 5	53.07	+14	9.46	+ 4	22.38	+5	57.24	+
	17	45.12	0	8.69	+ 6	52.22	+ 3	9.69	+ 6	22.35	+3	57-57	+
	18	44.87	-3	8.86	+ 6	51.36	-10	9.91	+ 7	22.31	+1	57.90	
	19	44.61	6	9.03	+ 5	50.48	-20	10.12	+ 6	22.27	-1	58.22	
	20	44.36	8	9.19	+ 2	49.59	-27	10.33	+ 3	22.23	4	58.55	+
	21	44.10	8	9.34	— 1	48.70	-28	10.53	0	22.18	-5	58.87	+
	22	43.84	6	9.49	- 4	47.79	-23	10.73	- 3	22.12	-6	59.19	+
	23	43.57	-3	9.63	6	46.88	-13	10.92	- 5	22.06	5	59.50	-
	24	43.30	+1	9.77	- 6	45.95	0	11.11	- 6	22.00	-3	59.81	
	25	43.04	+4	9.90	- 5	45.01	+13	11.29	- 6	21.93	0	60.12	-
	26	42.77	+7	10.02	_ 2	44.06	+24	11.46	- 4	21.86	+3	60.43	_
	27	42.50	+-8	10.14	+ 1	43.11	+31	11.63	0	21.78	+6	60.74	
	28	42.23	+8	10.25	+ 5	42.15	+32	11.79	+ 3	21.69	+8	61.04	-
	29	41.95	+6	10.36	+ 8	41.18	+26	11.95	+ 7	21.60	+8	61.34	
	30	41.68	+3	10.46	+10	40.20	+16		+ 9				+
	31	41.40	0	10.55	+10		+ 3	12.24	+10	_		61.93	+
	32	41.12	-4		+ 8			1	+ 9		1		+-
sec δ,	tg ð	+1	3.66	 - - 13	3.63	+4	 9.94	-1-49	9.93	+12	2.29	+12	2.25

191	2	51	Hev. (lephei 5"	.2.	r H	ev. Dr	aconis 4	".3.	εUrsa	ie mi	inoris 4 [™]	.2.
	3	AR.	(il.	Dekl.	Œ Gl.	AR.	∝ Gl.	Dekl.	Gl.	AR.	Œ Gl.	Dekl.	Œ GI.
		7 ^h 1 ^m	ni 8 10.0	-F87° 11'	in 	9 ^h 25 ^m	in 0.01	+81°42'	in " 0.01	16 ^h 54 ^m	in o.or	+82° 10′	in o.or
Nov.	29	0.51	- 4	7.25	- 8	0.78	-2	16.08	- 7	35.94	-1	44.21	+8
	30	0.90	+ 1	7.47	10	0.96	- 1	16.08	-10	35.89	-3	43.86	7
Dez.	I	1.29	+ 6	7.69	9	1.14	0	16.08	-10	35.84	4		5
	2	1.67	10	7.92	- 7	1.32	+2	16.10	- 9	35.80	-5	43.16	+2
	3	2.04	+12	8.15	<u> </u>	1.49	+4	16.12	- 6	35.76	-5	42.81	-2
	4	2.41	+13	8.38	- + I	1.66	+4	16.14	- 3	35.72	-4	42.45	- 5
	5	2.77	+11	8.62	+ 5	1.84	+4	16.16	+ 2	35.69	-2	42.09	-8
	6	3.12	+ 6	8.86	+ 8	2.01	+3	16.19	+ 6	35.66	0	41.73	-9
	7	3.47	+ 1	9.11	+ 9	2.19	+2	16.23	+ 8	$\begin{cases} 35.64 \\ 35.62 \end{cases}$	+2	41.37	-8
	8	3.81	į l	_	_			16.27		35.62	+3	41.01	-5 -2
	0	3.01	— 5	9.36	+ 8	2.36	0	'	+ 9	35.59	+4	40.65	-4
	9	4.14	-10	9.61	+ I	2.53	-2	16.32	+ 8	35.57	+5	40.28	+2
	10	4.46	-13	9.87	+ 3	2.70	-4	16.37	+ 6	35.55	+4	39.91	+6
	ΙΙ	4.78	-14	10.13	0	2.87	-5	16.43	+ 2	35.54	+3	39.55	+9
	12	5.09	-13	10.39	- 4	3.04	-4	16.50	- I	35.53	+1	39.18	+9
	13	5.40	- 9	10.66	— 6	3.21	4	16.57	- 4	35.52	— 1	38.82	-+8
	14	5.70	- 4	10.93	- 7	3.37	2	16.65	- 6	35.52	-2	38.46	+-6
	15	5.99	+ i	11.20	_ 6	3.53	0	16.73	6	35.52	3	38.10	- -2
	16	6.27	+6	11.47	- 4	3.69	$+\mathbf{r}$	16.82	- 5	35.52	3	37.74	2
	17	6.55	+ 9	11.75	— I	3.85	+3	16.92	- 3	35.53	-2	37.38	-5
	18	6.82	+10	12.03	+ 3	4.01	+3	17.02	0	35.54	I	37.02	-8
	19	7.08	+ 8	12.31	+ 6	4.17	+3	17.13	+ 4	35.55	+r	36.66	-9
	20	7.33	+ 5	12.60	+ 8	4.33	+3	17.24	+ 7	35.57	+2	36.30	-7
	21	7.57	+ 1	12.89	+ 8	4.49	+I	17.36	+ 8	35.59	+3	35.94	-5
	22	7.80	— 3	13.18	+ 7	4.65	0	17.49	+ 7	35.61	+3	35.58	_I
	23	8.03	$-\tilde{7}$	13.48	+ 4	4.80	2	17.62	+ 5	35.63	+-3	35.22	- -2
		8.25	_ 8	13.77	0	4.05	-3	17.76	+ 2	35.66	$+\mathbf{I}$	34.87	+6
	24	8.46	-8	14.07	- 4	4.95 5.10	-3	17.90	- 2	35.69	0	34.52	+8
	26	8.66	$-\frac{5}{5}$	14.37	-4 - 7	5.25	-3	18.05	- 6	35.73	—2	34.17	+8
	27	8.85	_ I	14.67	_ ₉	5.39	-2	18.20	- 9	35.77	-4	33.82	+6
	28	9.03	+ 4	14.07	— 9 —10	5.53	0	18.35	— I O	35.81	-5^{-4}	33.47	+3
		,											
	29	9.21	+ 8	15.28	— 8	5.67	+1	18.51	IO	35.85	-5	33.12	0
	30	9.38	+12	15.59	- <u>5</u>	5.81	+3	18.67	- 8	35.90	-5	32.78	-4
	31	9.53	+13	15.90	— I	5.95	+4	18.84	- 4	35.95	-3	32.44	-7
	32	9.68	+12	16.21	+ 3	6.09	+4	19.01	0	36.00	-1	32.10	-9
see 8, te	g ð	+20	37	- -2 0.	35	-+-6	-93	-+6.	86	+7.	35	- + -7.2	8

		δUrs	sae mi	noris 4 ^m .	3.	λUr	sae mi	noris 6"	1.8.	76	Drac	onis 6 ^m .c).
191		AR.	Gl.	Dekl.	Gl.	AR.	Œ GI.	Dekl.	Gl.	AR.	Gl.	Dekl.	GI.
		17 ^h 59 ^m	in 0.01	+86° 36′	in o.1	19 ^h 4 ^m	in s o.01	+89°0′	in 0.01	20 ^h 48 ^m	in o.or	+82° 12′	in ".o.or
Nov.	29	39.61	0.01	50.35	-+-8	67.71	+ 9	49.54	+ 8	46.03	+3	60.80	+ 6
	30	39.38	- 4	50.05	+9	66.61	$-\tilde{4}$	49.32	+ 9	45.87	+I	60.71	+ 9
Dez.	1	39.16	8	49.75	+7	65.53	— 18	49.09	+ 9	45.71	0	60.62	+10
	2	38.94	-10	49.45	+5	64.47	-30	48.86	+ 7	45.55	-2	60.52	+ 9
	3	38.73	-11	49.14	+1	63.42	-37	48.63	+ 4	45.39	-4	60.41	+ 7
	4	38.53	10	48.83	-3	62.39	—37	48.39	_ I	45.23	-4	60.30	+ 3
	5	38.33	- 7	48.52	-7	61.38	<u>-31</u>	48.15	- 4	45.08	<u>-4</u>	60.18	— I
	6	38.14	- 3	48.21	<u>-9</u>	60.39	19	47.90	— 7	44.92	-3	60.06	- 5
	7	37.96	+ 2	47.90	-9	59.42	- 3	47.65	— 9	44.77	2	59.93	— 8
	8	37.78	+ 6	47.58	-7	58.47	+14	47.40	- 8	44.62	0	59.79	— 9
	9	37.61	+10	47.26	-4	57.54	+28	47.15	— 6	44.47	+2	59.65	- 8
	10	37-44	+11	46.94	0	56.63	+37	46.89	— 3	44.32	+4	59.51	6
	ΙΙ	37.28	+11	46.62	4	55.73	+39	46.62	+ 1	44.17	+5	59.36	— 3
	12	37.13	+ 9	46.29	+7	54.86	+35	46.35	+ 5	44.02	+5	59.20	0
	13	36.99	+ 5	45.96	+9	54.01	-1-25	46.08	+ 7	43.88	+4	59.04	+ 4
	14	36.85	+ 1	45.63	+9	53.18	+11	45.81	+ 8	43.74	+3		+ 6
	15	36.72	- 3	45.30	+7	52.37	— 3	45.53	+ 7	43.60	+1	/ /	+ 7
	16	36.60	- 6	44.97	+4	51.58	-15	45.25	+ 5	43.46	-I	1 2 2	+ 6
	17	36.48	- 7	44.64	0	50.82	-24	44.97	+ 1	43.32	-2	J J .	+ 3
	18	36.37	- 6	44.30	-4	50.08	-25	44.68	- 3	43.18	-3	58.16	0
	19	36.27	- 4	43.97	- 7	49.36	-21	44.39	- 6	43.05	-4]	<u> </u>
	20	36.18	— I	43.63	<u>-9</u>	48.66	-12	44.10	— 8	42.92	-3	57.77	— 6
	21	{ 36.09 36.01	+ 2 + 5	43.29 42.95	$-8 \\ -6$	47.98	0	43.81	- 9	42.79	-2	57-57	- 8
	22	35.94	+ 7	42.61	-3	47.33	+11	43.51	- 7	42.66	C	57.36	- 8
	23	35.87	+ 7	42.27	+1	46.70	+20	43.21	4	42.54	+2	57.15	– 6
	24	35.81	+ 5	41.93	5	46.10	+24	42.91	0	42.42	+3	56.93	- 3
	25	35.76	+ 2	41.58	+8	45.52	+22	42.60	+ 3	42.30		-	+ 1
	26	35.72	— 2	41.24	+9	44.96	+14	42.30	+ 7	42.18	+3		+ 5
	27	35.68	- 6	1 /	+8	44.43	+ 1	41.99	+ 9	42.06	+2	11 2	+ 8
	28	35.65	10	40.56	+6	43.92	-r3	41.68	+10	41.95	C	56.03	+10
	29	35.63	11	'	+2	43.43	-26	41.37	+ 8	41.84	1	55.79	+10
	30	35.61	-11	39.88	-2	42.97	-35	41.06	+ 5	41.73	-3	55.55	+ 8
	31	35.60	— 9	39.54	-5	42.53	-38	40.74	+ 1	1 '	1		+ 5
	32	35.60	- 5	39.20	-8	42.12	-34	40.42	- 3	41.52		55.05	+ 1
			-		1		-					11	
secδ,	tgδ	+10	5.92	+16	.90	+	58.02	+5	8.02	+	7.38	+7	.31

****	Oc	tantis	4 G. 6 ^m		ζ(octanti	is 6 ^m - 5 ¹	m •	ı Oc	tantis	$6^{m}-5^{m}$	ıi.
1913	AR.	Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	∝ Gl.	AR.	Œ Gl.	Dekl.	Gl.
	1 42 m	in s o.or	-85° 12′	in 0.01	9 ^h 9 ^m	in e 0.01	-85° 18′	in " 0.01	12 ^h 45 ^m	in s o.o1	-84° 38′	in
Jan. o	28.69	+-6	50.36	+ 1	39.58	-3	39.78	+ 7	36.84	-5	44.78	+ 2
I	28.42	+5	50.37	- 3	39.70	+1	40.12	+ 6	37.10	-3	44.87	+ 4
2	28.15	+3	50.38	- 4	39.82	+3	40.46	+ 4	37.36	0	44.97	+ 5
3	27.88	0	50.39	— 6	39.94	+5	40.80	+ 1	37.62	+3	45.08	+ 5
4	27.61	-3	50.40	– 6	40.05	+6	41.14	— 3	37.87	+5	45.19	+ 3
5	27.34	6	50.39	- 4	40.15	+-5	41.49	— 6	38.13	+6	45.31	C
6	27.07	-7	50.38	r	40.25	+3	41.84	- 9	38.38	+6	45.44	<u> </u>
7	26.80	-7	50.36	+ 2	40.35	0	42.19	—10	38.63	+5	45.57	6
8	26.52	-6	50.34	+ 5	40.44	-3	42.54	– 8	_	+3	45.70	— 8
9	26.25	-3	50.31	+ 7	40.52	-5	42.90	– 6	39.13	0	45.84	– 8
10	25.98	0	50.27	+ 8	40.60	-6	43.26	- 2	39.38	-3	45.99	- 7
11	25.70	+3	50.23	+ 7	40.68	-6	43.62	+ 2	39.63	5	46.14	- 4
12	25.43	+6	50.18	+ 4		- 5	43.98	+ 6	39.87	6	46.30	— 1
13	25.15	+7	50.12	+ 1	40.83	3	44.34	+ 9	40.12	-6	46.47	+ 3
14	24.88	⊣ -8	50.06	— 3	40.89	+I	44.71	+10	40.36	-5	46.64	+ 7
15	24.61	+6	50.00	- 7	40.95	+4	45.08	+ 9	40.61	-3	46.82	+10
16	24.34	+4	49.93	-10	41.00	+ 7	45.45	+ 7	40.85	0	47.00	+11
17	24.07	+1	49.85	-11	41.05	+8	45.82	+ 4	41.09	+3	47.19	+10
18	23.80	-3	49.76	-10	41.09	+8	46.19	0	41.33	+5	47.39	+ 7
19	23.53	5	49.67	- 7	41.13	+7	46.57	- 4	41.57	+-6	47.59	+ 4
20	23.26	-6	49.57	- 4	41.17	+4	46.95	_ 6	41.81	+6	47.79	C
21	22.99	-6	49.47	0	41.20	+I	47.33	- 7	42.04	+-5	48.00	4
22	22.72	-5	49.36	+ 4	41.23	3	47.71	- 6	42.27	+3	48.22	- 7
23	22.45	-2	49.25	+ 7	41.25	- 5	48.09	- 4	42.50	0	48.44	- 8
24	22.18	+I	49.13	+ 8	41.26	-7	48.47	— I	42.73	-3	48.66	8
25	21.91	-+-3	49.00	+ 8	41.27	-7	48.85	+ 2	42.96	-5	48.89	- 6
26	21.65	+5	48.87	+ 6	41.28	-6	49.24	+ 5	43.18	-6	49.13	- 3
27	21.38	+6	48.73	+ 3	41.28	-4	49.62	+ 7	43.40	-5	49.37	+ 1
28	21.12	+6	48.59	0	41.27	-1	50.01	+ 6		-3	49.61	+ 3
2 9	20.85	+4	48.44	- 3	41.26	+2	50.39	+ 5	43.84	$-\mathbf{r}$	49.86	+ 5
30	20.59	+1	48.28	- 5	41.25	+4	50.78	+ 2	44.06	+1	50.12	+ 5
31	20.33	-2	48.12		41.23	+5	51.16	- 2		+4	50.38	+ 4
Febr. 1	20.07	-5	47.95	- 4	_	+5	51.55	— 5	44.48	+6	50.64	+ 2
2	19.81	-7	47.78	— 2			51.93	– 8			50.91	- 2
3	19.55	-7	47.60	+ 1	41.15	+1	52.32	-10	44.90		51.18	- 5
4	19.30	7	47.42	+ 4	41.11	-2	52.70	- 9	45.10	+-4	51.46	- 1
5	19.05	<u></u>		+ 7	41.07	4	53.09	- 7			51.74	- 8
6	18.80	-2	47.03	+ 8	41.02	6	53.47	- 4		-I	52.03	- 8
sec ô, tg ô	+11		-11			2.24	—12	1	- -1c		IC	(

		Octa	ntis	20 G. 7 [™]		Octan	tis 2 6	G. 6 ^m →	7 ^m -	γ	Octan	tis 6 ^m .	
191	3	AR.	Gl.	Dekl.	GI.	AR.	€ Gl.	Dekl.	« Gl.	AR.	Œ GL	Dekl.	∝ G1.
		14 ^h 43 ^m	í11 8 0.01	-87° 47′	in " 0.01	16 ^h 27 ^m	in 0.01	-86° 12′	in " 0.01	18h 3m	in 0.01	-87° 39′	in 0.01
Jan.	0	56,14	-12	37.54	— I	52.48	_ 6	23.76	- 4	15.18	- 6	58.60	6
	I	56.74	-10	37.44	+ 2	52.75	- 6	23.53	0	_	- 8	58.28	-2
	- 2	57.34	— 5	37.35	+ 5	53.03	- 5	23.31	+ 3		- 8	57.97	- - I
	3		+ 2	37.26	+ 6		— 2	23.09	+ 6		- 6	57.66	+5
	4	58.55	-⊢ 8	37.18	+ 6	53.60	+ 2	22.88	+- 8	16.23	- 2	57-35	-+8
	5		+13	37.11	+ 5	53.89	5	22.67	+ 7		+ 3	57.04	+9
	6		+16	37.04	+ 2		+ 8	22.47	+ 5		+ 8	56.74	+8
	7		+16	36.98	— 2	1 2 1 1/	+ 9	22.27	+ 2	· ·		56.44	+6
	8		+13	36.93	— 5	54.80	+ 9	22.07	I	, ,	+14	56.14	+-2
	9		+ 7	36.88	- 7	7.7	 7	21.88	- 5		+13	55.84	2
	10	62.28	0	36.84	8	55.43	+ 3		- 7		+ 9	55.54	-6
	11	62.91	- 7	36.81	- 7		- I	21.51	- 8		+ 3	55.25	8
	12	63.54	-13	36.78	5		- 5	21.33	- 7		- 2	54.96	
	13	64.18	16	1 .	— I	1 / '	— 8		- 5			54.67	-8
	14		-17	36.75	+ 3	1	-10		<u> </u>	1	-15	54.39	5
	15	65.46	— 14	36.74	+ 7	, , ,	10		+ 3		-17	54.11	-1
	16	66.10	-10	0 10	+ 9	2, .				20.26		53.83	+3
	17 18	66.74	_ 2] , , ,	+10					20.66	-14	53.55	+0
	19	67.39	+ 4 +10	36.74 36.75	+10	1	- 2 + 2	-	+10		-9 - 2	53.28 53.01	+6
	20	68.69	+12	1 2 11	+ 3		+ 5			21.89	+ 4	52.74	
	21	69.34	+12 +10		- I - 5	1 2/	+ 7			22.32	_	52.48	+
	23	70.64	+ 5	0 0	- 5 - 8		+ 7 + 6		— 2 — 6		+I2 +I2	52.22 51.96	
	24	71.30	— I		- 9	1 37	+ 3	,	_ 8			51.70	-
		1	_ 6		8	1				'			_
	25 26	71.95	-11		- 6	1 27	- 3	11 / .5	- 9 - 8		1	51.45	
	2.7	1 '	-12		- 3		5		- 6			50.96	-
	28	73.92	-11	-	I		- 6		2	1 - "	1 -	50.72	-
	29		— 7		+ 4				+ 2		1	50.49	
	30		I		+ 6		-		+ 5	1		50.26	
	31	0.0	+ 6			62.83	3	1		26.99		50.20	
Febr		76.53		3, 3	+ 5					27.50		49.80	
	2					63.59				28.01			+
	3					63.98				28.53		49.37	+
	4	1 0 0	+15		_ 4				1	29.05		49.16	+
	5				- 7					29.58			
	6	_	+ 3		- 8				- 7		+11	48.75	-
	tg ð	-1-25		11	5.96		5.11	1			4.54	-24.	-

TOTA	5 Octantis 6 ⁿ .				β Octantis 4 ^m – 5 ^m .				τ Octantis 6 ^m .			
1913	AR.	Gl.	Dekl.	Œ Gl.	AR.	GL.	Dekl.	Gl.	AR.	Gl.	Dekl.	(i).
	19" 19"	in s o.o1	-89° 13′	in o.or	22 ^h 37 ^m	in s 0.01	-81°50′	in 0.01	23 ^h 15 ^m	in 8 0.01	-87° 57′	in 0.01
Jan. o	50.72	+ 7	69.84	-8	12.66	+3	38.93	- 4	30.20	+14	58.75	— 3
I	50.86	-10	69.49	-7	12.55	+2	38.71	-6	29.68	+ 7	58.55	- 5
2	51.02	-21	69.14	-4	12.45	0	38.48	6	29.16	0	58.35	- 6
3	51.21	-27	68.79	0	12.35	2	38.24	- 4	28.65	- 7	58.14	- 5
4	51.44	-26	68.44	+4	12.25	-3	38.00	— I	28.14	-12	57.93	- 2,
5	51.70	-17	68.cg	+7	12.15	4	37.75	+ 2	27.64	15	57.71	+ I
6	51.99	- 4	67.74	1-9	12.05	-3	37.50	+ 6	27.14	-15	57.49	4
7	52.31	+12	67.39	+9	11.96	-2	37.25	+ 8	26.65	-12	57.26	+ 7
8	152.66	+ 27	67.05	+ 7	11.87	I	36.99	+ 9	26.16	- 6	57.02	+ 9
9	53.46	+ 37	66. ₇₀	+ 4	11.78	+1	36.73	+ 8	25.68	+ 1	56.78	+ 9
10	53.91	+35	66.00	-4	11.69	+3	36.46	+ 6	25.21	+ 8	56.53	
11	54.38	-22	65.66	7	11.60	+4	36.19	+ 2	24.74	+14	56.28	
12	54.88	4	65.31	9	11.52	+4	35.91	_ 2	24.28	+16	56.03	+ 4
13	55.42	-16	64.97	-9	11.44	3	35.63	$-\frac{2}{6}$	23.83	+15	55.77	— 5
14	55.99	35	64.62	-7	11.36	+2	35.34	- 9	23.38	+11	55.51	_ 8
. 15	56.58	48	64.28	4	11.28	0	35.05	10	22.94	+ 4	55.24	_10
16	57.20	-53	63.93	C	11.20	-2	34.76	-10	22.51	- 3	54.96	11
17	57.85	-49	63.59	+4	11.13	-3	34.46	- 8	22.09	-10	54.68	- 9
18	58.53	-37	63.25	+6	11.06	-4	34.16	- 5	21.67	-15	54.39	_ 6
19	59.24	-19	62.91	+8	10.99	4	33.86	— ī	21.27	-17	54.10	_ 2
20	59.98	+ 2	62.57	+8	10.92	-4	33.55	+ 3	20.87	-16	53.81	I
21	60.74	1-20	62.24	+6	10.85	2	33.24	+ 6	20.48	11	53.51	+ 4
22	61.53	-1-35	61.90	+3	10.79	I	32.92	+ 7	20.10	- 4	53.21	+ 7
23	62.36	- -4I	61.57	-1	10.73	+1	32.60	+ 7	19.72	+ 3	52.90	+ 7
24	63.21	+39	61.24	-5	10.67	+3	32.28	+ 5	19.35	+10	52 .59	+ 6
25	64.09	29	60.91	7	10.61	+4	31.95	+ 3	18.99	+15	52.28	+ 4
26	65.00	+14	60.58	-8	10.56	+4	31.62	— I	18.64	+17	51.96	+ 1
27	65.94	- 2	60.25	-7	10.51	-1-4	31.29	- 3	18.30	+15	51.64	_ 2
28	66,90	-17	59.92	-5	10.46	+2	30.96	- 5	17.97	+II	51.32	- 4
2 9	67.89	26	59.60	-1	10.41	0	30.62	- 6	17.65	+ 4	50.99	- 6
30	68.91	-27	59.28	+2	10.36	-1	30.28	- 5	17.33	- 4	50.66	- 5
31			58.97	+6	10.32	-3	2 9.94	- 2		10	50.33	- 4
Febr. 1	71.02		58.66					+ 1	16.72			0
2	72.11	+ 6		+9				+ 4	16.43	-16		+ 3
3	73.23	+23	58.04	+-8	10.20	3	28.89	+ 7	16.15	-14	49.31	+ 6
4	74-37	+35	57.73	+6	10.17	- I	28.54	+ 9	15.88	- 8	48.96	+ 8
5	75.53			+2	10.14	0		+ 9			48.61	
6	76.72			-2	10.11	+2		+ 7		+ 6	48.26	+ 8
sec 8, tg 8	+74	+74.82 -74.82			+7.	.05	<u>6.</u>	.98	- +-2 8.17		—28.15	

1913	Octar	ζΟ	ζ Octantis $6^m - 5^m$.				e Octantis 6 ^m – 5 ^m .				
	AR.	l. Dekl.	Gl.	AR.	Cil.	Dekl.	(G).	AR.	Cil.	Dekl.	Œ GJ.
	Ih42m j	0) 14	in 0.01	9 ^h 9 ^m	in s o.or	-85° 18′	in 	12 ^h 45 ^m	in o.o1	-84° 38′	in 0.01
Febr. 6	18.80		+ 8	41.02	<u>-6</u>	53.47	- 4	45.50	_I	52.03	- 3
7	18.55 +	''	+ 8	40.97	-7	53.86	+ 1	45.70	-4	52.32	
8	18.30 +	-5 46.63	+ 6	40.91	<u>-6</u>	54.24	+ 5	45.89	6	52.61	
9	18.06 +	7 46.42	+ 2	40.85	-3	54.62	+ 8	46.08	6	52.91	+
10	17.82 +	-8 46.20	- 2	40.78	0	55.00	-+-10	46.27	6	53.21	+-
11	17.58 +	-7 45.98	6	40.71	+3	55.38	+10	46.45	-4	53.52	+
12	17.34 +	.	- 9	40.64	+6	55.76	+ 8	46.63	— 1	53.83	+1
13	17.10 +		10	40.56	+8	56.14	+ 5	46.81	+2	54.14	+1
14		1 45.29	-10	40.48	+8	56.52	+ 1	46.99	+4	54.46	+
15	16.63 -	45.05	_ 8	40.39	+7	56.90	- 3	47.16	+6	54.78	+
16	16.40 -	6 44.81	- 5	40.30	+5	57.28	— 5	47-33	+6	55.11	+
17		6 44.56	- I	40.20	+2	57.65	- 7	47.50	+5	55.44	
18		5 44.30	+ 3	40.10	-I	58.02	- 7	47.66	+3	55.77	
19	15.72 -	3 44.04	+ 6	39.99	-4	58.39	<u> </u>	47.82	0	56.11	_
20	15.50	0 43.78	+ 8	39.88	6	58.76	- 2	47.98	-2	56.45	
2.1	15.28	43.52	+ 8	39.77	-7	59.13	+ I	48.14	-4	56.79	_
22		-4 43.25	+ 7	39.65	_6	59.50	+ 4		6	57.13	_
23		-6 42.98	+ 4	39.53	-4	59.87	+ 6		-6	57.47	
24	1	-6 42.70	+ 1	39.40	-2	60.23	+ 7	_	-4	57.82	
25		-4 42.42		39.27	+1	60.59	+ 6	48.73	-2	58.17	+
2 6		-2 42.13	5	39.13	+4	60.95	+ 3		0	58.52	+
27		-1 41.84		38.99	+5	61.31	, 0		+3	58.88	+
28	1	-4 41.55		38.85	-+-6	61.67	- 4		+5	59.24	+
März 1		-6 41.25	-		+4	62.02	- 7		+6	59.60	1
2		-8 40.95	_	1 0 0	+2	62.37	- 9		+6	59.96	-
								1	1 1		
3		40.64	_	38.41	-I	62.72	-10	1 .//	+5	60.32	_
4	J .	-6 40.33	_		-3	63.06	— 8	.,,	+3	60.69 61.06	-
5 6	12.87 - 12.69	40.02	_		-6	63.40	<u> </u>		0		
		0 39.70 -4 39.38			$-7 \\ -6$	63.74	- I + 3	1 '/ '		61.43	-
7											
8	1 2 1	-6 39.06			一 5	64.40	+ 6			62.17	
9		-7 38.74		37.41		64.73	+ 9			7.7	+-
10		7 38.41				65.06	+10			62.92	+
11		-6 38.08				65.38	+ 9				+
12	11.68 -	-3 37.74	IC	1		65.70	+ 6		О	63.68	+
13	11.52	0 37.40				66.02	+ 3	50.57	+3	64.06	+
14	11.37	-3 37.06				66.33	3	1 / /		64.44	+
15	11.22	5 36.72	6	36.28	+6	66.64	5	50.73	+6	64.82	+
			i	1	1			1	1		

	Oct	antis	20 G. 7	u •	Octant	tis 2 6	G. 6 ^m -	7 ^m -	γ.	Octar	ntis 6 ^m .	_
1913	AR.	Œ Gl.	Dekl.	« Gl.	AR.	Œ Gl.	Dekl.	Gl.	AR.	C Gl.	Dekl.	Gl.
	14 ^h 44 ^m	in 8 0.01	-87° 47′	in 0.01	16 ^h 28 ^m	in s o.or	-86° 12′	in 0.01	18 ^h 3 ^m	in s 0.01	-87° 39'	iu 0.01
Febr. 6	19.78	+ 3	37.98	- 8	5.15	+ 5	18.45	- 7	30.12	+11	48.75	4
7	20.42	- 4	38.10	_ 8		+ 1	18.40	– 8	30.66	+ 6		-7
8	21.06	-11	38.22	- 7	5.94	— 3	18.36	— 8	31.21	0	48.35	-9
9	21.70	-16		— 3	6.34	- 7	18.32	— 6	31.76	- 7	48.16	-8
10	22.34	-17	38.47	+ 1	6.73	— 1 0	18.29	- 3	32.32	-13	47.98	6
11	22.97	16	38.61	+ 5	7.13	I I	18.26	+ 1	32.89	-17	47.80	-3
12	23.60	-11	38.76	+ 8	7.53	10	18.24	+ 5	33.46	-17	47.62	$+\mathbf{I}$
13	24.23	— 5	38.91	+10		- 7	18.22	+ 8	34.03	-15	47.44	+5
14		+ 2	39.07	+10		- 3	18.21	+10	34.61	11	47.27	+8
15	25.48	+ 8	39.23	+ 8	8.73	+ I	18.20	+ 9	35.19	— 5	47.11	+9
16	26.10	+11	39.40	+ 5	9.13	+ 4	18.20	+ 7	35.78	+ 2	46.95	+8
17	26.72	+12	39.58	+ 1	9.54	+6	18.21	+ 4	36.37	+ 7		+6
18	27.34	+11	39.76	- 3	9.94	+ 7	18.22	0	36.97	+11		+2
19	27.95	-⊢ 7	39.95	- 6	10.35	+ 6	18.24	— 4	37.57	+12		-2
20	28.56	+ 1	40.14	— 8	10.75	+ 4	18.26	- 7	38.17	+11	46.35	-5
21	29.17	— 5	40.33	- 9	11.15	+ 1	18.28	<u> </u>	38.78	+ 7		8
22	29.77	- 9	40.53	- 7	11.56	- 2	18.31	— 9	39.40	+ 2	46.08	-9
23	30.37	-12	40.73	- 4	11.96	— 5	18.34	- 7	40.02	— 3	45.95	-8
24	30.96	I 2	40.93	- I	12.37	- 6	18.38	- 4	40.64	- 7	45.82	-5
25	31.55	— 9	41.14	+ 3	12.77	– 6	18.42	0	41.26	— 9	45.70	-2
2 6	32.13	- 4	41.35	+ 5	13.18	— 4	18.47	+ 4	41.88	— 8	45.59	+2
27	32.71	+ 3	41.57	+ 6	13.58	— I	18.53	+ 7	42.51	- 5	45.48	+6
28	33.29	+ 9	41.79	+ 6	13.98	+ 3		+ 8	43.14	— I	45-37	+-8
März 1	33.86	+14	42.02	+ 4	14.38	+ 6	18.65	+7	43.77	+ 5		+9
2	34.42	+16	42.25	+ I	14.78	+ 8	18.72	+ 5	44.40	+10	45.18	+8
3	34.98	+16	42.49	_ 2	15.18	+10	18.79	+ 2	45.04	+13		+5
4	35.54	+12		— 6	, , ,	+ 9	18.87	— 2		+14		$+\mathbf{I}$
5	36.09	+ 6		- 8		+6	18.95	- 6	46.32	+13	11	-3
6	36.63	- I	43.22	— 8		+ 3	19.04	— 8		+ 9		-6
7	37.17	— 8	43.47	— 7	16.76	- 2	19.13	— 8	47.61	+ 3	44.78	-8
8	37.70	-14	43.73	- 4		6	19.23	- 6		- 4		-9
9	38.23	17		C	17.55	- 9	19.33	- 4	48.91	-11	44.65	-7
10	38.75	16	44. 2 6	+ 4		-ro	19.44	0	., ,		44.60	-4
11	39.27	-13		+ 7					50.21			—1
12	39.79	— 8	44.80	+10	18.72	— 8	19.67	+ 7	50.86	-16	44.50	+3
13	40.30	— 1		+10		- 5		+ 9		_		+7
14	40.80			+ 9		— I	19.92	+10		-	44.43	+-8
15	41.29	+10	45.63	+ 7	19.89	+ 3	20.05	+ 8	52.83	— I	44.40	+9
sec δ, tg δ	+25	.98	-25	.97	+15	.11	15	.08	1-24	 1.5 2	— 2 4	.50

7070	0	Octar	ntis 6 ^m .		β ()	ctant	is 4 ¹¹ – 5	m	7	Octar	ntis 6 ^m .	
1913	AR.	Gl.	Dekl.	∢ Gl.	AR.	Gl.	Dekl.	ু G1.	AR.	CI.	Dekl.	Œ Gl.
	19 ^h 20 ^m	in s 0.01	89° 13′	in ". 0.01	22 ^h 37 ^m	in 8 10.0	-81°50′	in 01	23 ^h 15 ^m	in o.or	-87° 57′	in ,,,
Febr. 6	16.72	+39	57.13	-2	10.11	+2	27.82	+ 7	15.37	+ 6	48.26	+ 8
7	17.93	+29	56.83	6	10.09	+3	27.46	+ 4	15.12	+12	47.90	+ 5
8	19.17	+12	56.53	8	10.07	+4	27.10	0	14.89	+16	47.54	+ 1
9	20.43	- 8	56.24	-9	10.05	+4	26.73	- 4	14.66	+16	47.18	- 3
10	21.71	-29	55.95	8	10.03	+3	26.37	- 8	14.44	+13	46.81	— 7
11	23.01	-44	55.66	6	10.01	+1	26.00	-10	14.23	-1- 7	46.44	- 9
12	24.33	-52	55.38	2	10.00	-1	25.63	-10	14.04	0	46.07	-10
13	25.67	-52	55.10	+2	9.99	-3	25.26	- 9	13.85	- 8	45.70	-10
14	27.04	-43	54.82	+6	9.98	-4	24.89	- 6	13.67	-14	45.33	— 8
15	28.43	-27	54.55	+7	9.97	-4	24.51	- 3	13.50	-17	44.95	- 4
16	29.83	- 7	54.28	+8	9.97	-4	24.14	+ 1	13.34	-17	44.58	0
17	31.25	+13	54.01	十7	9.97	-3	23.76	+ 5	13.18	-14	44.20	+ 3
18	32.70	+29	53.75	+4	9.97	-1	23.38	+ 7	13.04	- 8	43.82	+ 6
19	34.17	+38	53.49	0	9.97	0	23.00	+ 7	12.91	0	43.44	+ 7
20	35.65	+40	53.23	-3	9.98	+2	22.62	+ 6	12.79	+ 8	43.06	+ 7
21	37.15	+33	52.98	6	9.99	+4	22.24	+ 3	12.67	+14	42.67	+ 5
22	38.67	+20	52.73	-8	10.00	+4	21.86	+ I	12.57	+17	42.29	+ 2
23	40.21	+ 4	52.48	-8	10.01	+4	21.48	– 2	12.47	+-16	41.90	— I
24	41.76	-11	52.24	6	10.02	+3	21.10	5	12.39	+13	41.51	- 4
25	43.33	-23	52.00	-3	10.04	$+\mathbf{I}$	20.72	— 6	12.31	+ 7	41.12	- 5
26	44.92	28	51.77	+1	10.06	-I -2	20.34 19.96	- 5 - 2	12.25	- I	40.73	- 6
27	46.52	25	51.54	+-5	10.10	3	19.57	- 3 O	12.19	_ 8	40.34	- 4
28	48.14	-15	51.31	+8	10.13	4	19.19	+ 3	12.15	-13	39.95	_ 2
März 1	49.77	o	51.09	+9	10.16	<u>-3</u>	18.81	+ 6	12.11	-16	39.55	+ 2
2	51.42	+17	50.87	+9	10.19	-2	18.43	+ 9	12.09	-15	39.16	- - +- 5
3	53.09	+31	50.66	-1-7	10.22	0	18.04	+ 9	12.07	11	38.76	+ 8
4	54.77	+40	50.45	+4	10.26	+I	17.66	$+$ $\hat{8}$	12.06	- 4	38.37	+ 9
5	56.46	+42	50.24	0	10.30	+3	17.28	+ 5	12.06	+ 3	37.97	+ 9
6	58.17	+35	50.04	— 5	10.34	+4	16.90	+ 2	12.07	+10	37.58	+ 6
7	59.89	+20	49.84	<u>8</u>	10.38	+4	16.51	— 3	12.09	+14	37.18	+ 3
8	61.62	+ 1	49.65	-9	10.43	+3	16.13	- 6	[12.12	+16	36.79	_ I
9	63.36	20	49.46	-9			15.75	- 9	12.16	+15 +10	36.39 36.00	_ 5 _ 8
10	65.11	-38	49.28	-7	10.53	0	15.37	-10				-10
11	66.87		49.10	-4	10.58		14.99	-10			35.20	10
12	68.65	-53	48.92	0	10.64	-3	14.61	- 8			34.80	- 9
13	70.44	47	48.75	+4	10.70	-4	14.23	<u> </u>	12.50	-16	34.41	- 6
14	72.23	-34	48.58	+-7	10.76	1	13.85	0	-	-17	34.01	2
15	74.03	-15	48.42	+-8	1	1	13.47			-15	33.61	+ 2
sec 8, tg 8	-1-74		74.	<u>.</u> ζΙ	+7		6	<u> </u>		3.11		

1913	Ос	tantis	4 G. 6"		ζΟ	ctanti	s 6 ^m – 5	m.	t 0c	etanti	s 6 ^m -	5 ^m
1913	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	CGl.	Dekl.	Gl.	AR.	Œ Gl.	Dekl.	Œ Gl.
	1 42 m	in s 0.01	-85° 12′	in 0.01	9 ^h 9 ^m	in 8 0.01	-85° 1 9′	in v o.oī	12 ^h 45 ^w	in	-84° 39′	in
März 15	11.22	<u>-5</u>	36.72	- 6	36.28	+6	6.64	— 5	50.73	+6	4.82	0.01 + 3
16	11.07	<u>_6</u>	36.37	— <u>3</u>	36.08	+3	6.95	- 7	50.81	+5	5.20	— I
17	10.92	6	36.02	+ I	35.88	0	7.26	- 7	50.89	+4	5.59	4
18	10.78	-4	35.67	+ 5	35.68	-3	7.56	- 6	50.96	+2	5.97	— 7
19	10.64	-2	35.32	+ 7	35.47	6	7.86	— 3	51.03	—I	6.36	— 8
20	10.51	$+\mathbf{I}$	34.97	+ 8	35.26	- 7	8.15	0	51.10	-4	6.75	- 7
21	10.38	+4	34.61	+ 7	35.05	-7	8.44	+ 3	51.16	-5	7.14	— · 5
22	10.25	+6	34.25	+ 5	34.83	-5	8.73	+ 6	51.22	6	7.53	- 2
23 24	10.13	+6	33.89	+ 2	34.61	-3	9.01	+ 7	51.27	5	7.92	+ 2
		+5	33.53	— I	34-39	0	9.29	+ 6	51.32	-3	8.31	+ 4
25	9.89	+3	33.16	- 4	34.17	+3	9.57	+ 5	51.37	-I	8.70	+ 5
2 6	9.78	0	32.79	— 6	33.94	+5	9.84	+ 1	51.41	+2	9.09	+ 5
28	9.67 9.57	-3	32.42	- 6	33.71	+5	10.11	- 3	51.45	+5	9.48	+ 4
29	9.47	<u>-5</u> -7	32.05 31.68	-4 -2	33.48 33.24	+5 +3	10.37	- 6	51.49	+7	9.87	+ 1
							_	- 9	51.53	+7	10.26	2
30 31	9.37 9.28	-7 6	31.31	+ 2	33.00	0	10.88	-10	51.56	+-6	10.65	- 6
April 1	9.19	-4	30.94	+ 5 + 8	32.76 32.52	2	11.13	- 9 - 6	51.59	+4	11.04	- 8
2	9.11	-I	30.18	+ 9	32.27	一5 一7	11.63	-6	51.61	+I -2	11.43	— 9 — 8
3	9.03	+2	29.80	+ 8	32.03	-7	11.87	+ 1	51.65	-4	12.20	- 5
4	8.95	+5	29.42	+ 5	31.78	_6	12.10	+ 5	51.66	6		
5	8.87	+7	29.04	+ 2	31.53	3	12.33	+ 8	51.67	_6	12.59	-2 + 2
6	8.80	+7	28.66	- 3	31.28	_I	12.55	+10	51.68	-5	13.36	+ 2 + 6
7	8.73	+6	28.28	– 6	31.03	+3	12.77	+ 9	51.68	-3	13.75	+ 9
8	8.67	+4	27.90	- 9	30.77	+6	12.98	+ 7	51.68	-1	14.13	+11
9	8.61	+1	27.52	-10	30.51	+8	13.19	+ 4	51.67	+2	14.51	+10
10	8.56	—2	27.13	- 9	30.25	+8	13.40	0	51.66	+4	14.89	+ 8
11	8.51	-4	26.75	- 7	29.99	+7	13.60	— 3	51.65	+6	15.27	+ 5
12	8.47	-6	26.36	- 4	29.73	+4	13.80	- 6	51.64	+6	15.65	+ 1
13	8.43	6	25.98	0	29.46	+2	13.99	- 7	51.62	+5	16.03	- 3
14	8.39	-5	25.59	+ 4	29.19	-2	14.18	- 6	51.60	+3	16.41	_ 6
15	8.36	-3	25.21	+ 6	28.92	-5	14.36	- 4	51.57	0	16.79	- 7
16	8.33	0	24.82	+ 8	28.65	一 7.	14.54	— 2	51.54	-3	17.16	- 7
17	{8.30 8.28	+3	24.44	+ 8 + 6	28.38	-7 - 6	14.72	+ 2	51.51	-5	17.53	_ 6
18	8.26	- -6	23.67	+ 3	28.11	<u>_6</u>	14.89	+ 5	51.48	6	17.90	— <u>3</u>
19	8.25	+6	23.28	0	27.84	-4	15.05	+ 7	51.44	6	18.27	0
20	8.25	+4	22.90	- 3	27.57	_I	15.21	+ 7	51.40	-4	18.64	+ 2
21	8.24	+2	22.51	- 5	27.30	+2	15.36	+ 5	51.36	- 1	19.01	+ 5
sec 8, tg 8	- - II	1.97	r 1	.93	-+·I	2.26	-12	2.21	+10	-	-10.	_

	Octan	tis	20 G. 7	n •	Octant	tis 26	$6 \text{ G. } 6^{\text{m}}$	7 ^m .	χ	Octan	tis 6 ^m .	
1913		« 31.	Dekl.	℃ Gl.	AR.	« Gl.	Dekl.	G1.	AR.	Gl.	Dekl.	Œ Gl.
	14 44	n 8	-87°47′	in 	16 ^h 28 ^m	in o.or	-86° 12′	ni 10.0	18 ^h 3 ^m	in s	-87° 39′	in 0.01
März 15		-10	45.63	+ 7	19.89	- - 3	20.05	+ 8	52.83	_ I	44.40	+9
16		-I2	45.91	+ 3	20.27	+6	20.18	+ 5	53.48	+ 5	44.37	+7
17	42.27 +	12	46.20	— 2	20.65	+ 7	20.32	+ 1	54.14	+10	44.34	+-2
18	42.75 +	- 1	46.49	- 5	21.03	+ 7	20.46	- 3	54.79	+12	44.32	
19	43.22 +	- 2	46.78	- 8	21.41	+ 5	2 0.61	– 6	55.45	+-11	44.31	2
20	43.68 —	- 3	47.08	- 9	21.79	+ 2	20.76	8	56.10	+ 9	44.30	-7
21	44.14 —	8	47.38	— 8	22.17	- I	20.92	- 9	56.76	+ 4	44.29	-9
22		II	47.68	- 5	22.54	- 4	21.08	– 8	57.42	- I	44.29	-8
23		12	47.99	_ 2	22.91	- 6	21.25	- 5	58.07	- 6	44.30	
24	.,,	II	48.30	+ 1	23.28	6	21.42	— I	58.73	- 8	44.31	3
25	45.91 —	6	48.61	+ 4	23.64	— 5	21.59	+ 3	59.38	- 9	44.32	+1
26	46.33	0	48.92	+ 6	24.00	– 2	21.77	+ 6	60.03	— 7	44-34	-1-4
27 28	46.75 +	- 1	49.24 49.56	+ 6		+ 1	21.95	+ 7	60.68	- 3	44.36	+7
29		16	49.88	+5 + 2	24.72 25.08	+ 5 + 8	22.13	+ 7 + 6	61.33	+3 + 8	44·39 44·43	+5
		li			-				,			i
30		17	50.20 50.53	— I	25.43 25.78	+ 9 + 9	22.52 22.72	+3 - 1		+12 +15	44.47	+6
April 1		9	50.86	— 5 — 7	-	+ 7	22.92	$-\frac{1}{6}$	63.92	+15	44.5 2 44.57	+3
2	49.08 +	- 1	51.19	- 8	26.47	+ 4	23.12	- 7	64.56	+11	44.62	
. 3	49.44	6	51.52	8	26.81	0	23.33	– 8	65.20	+ 5	44.68	5
4	49.79 —	9	51.86	– 6	27.15	- 4	23.54	— 8	65.84	_ 2	44.74	9
5		16	52.20	2	27.48	- 8	23.76	— б	66.48	- 8	44.81	{2
6		17	52.54	+ 2	27.81	10	23.98	2	67.11	-13	44.88	
7	50.80 —	15	52.88	→ 6	28.14	-10	24.21	+ 2	67.74	-17	44.96	-2
8	51.12 —	10	53.22	+ 9	28.46	- 9	24.44	+ 6	68.37	-17	45.04	+2
9	51.44 —	4	53.56	- 10	28.78	- 6	24.67	+ 9	69.00	— 16	45.12	+6
IO	51.75 +	11	53.91	+10	29.10	- 3	24.90	+10	69.62	-10	45.21	+8
11	52.05 +	8	54.26	+ 7	29.41	+ 1	25.14	+ 9	70.24	- 4	45.31	+9
12		12	54.61	+ 4		+ 4	25.38	+ 7	70.86	+ 3	45.41	
13	52.63 +	12	54.96	0	30.03	+ 6	25.62	+ 3	71.47	+ 8	45.51	+5
14	52.91 +	10	55.31	- 4	J J.	+ 7	25.86	r	,	+11	45.62	+1
15	53.18 +	5	55.66	- 7			26.11	- 5	, ,	+12	45.73	-3
16	53.44	0	56.01	— 8		+ 3	26.36	- 8	73.29		45.85	-0
17	53.69 —	6	56.36	8	31.23	0	26.61	— 9	73.89			{
18		10	56.72	6	31.52	- 3	26.87	- 8		+ 1	46.09	-9
19		13	57.07	- 3	31.80	— <u>5</u>	27.13	— 6	75.08	- 4	46.22	
20		12	57.43	, 0	32.08	-6	27.39	_ 3	75.67	— 8	46.36	
21	54.60 —	8	57.79	+ 3	32.35	- 5	27.66	+ 1	76.26	- 9	46.50	J
ec δ, tg δ	+26.02		—26.	or	-+-15.	T I	15.	08	+ 24.	52	24.5	· O

	σ	Octar	itis 6 ^m .		βΩο	tantis	s 4 ^m – 5	m	τ	Octar	ntis 6 ^m .	_
1913	AR.	Gl.	Dekl.	Gl.	AR.	Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Œ Gl.
	19 ^h 21 ^m	in 0.01	-89° 13'	in 0.01	22 ^h 37 ^m	in • 0.01	-81° 50′	in 	23 ^h 15 ^m	in 0.01	-87° 57′	in 0.01
März 15	14.03	-15	48.42	+ 8	10.82	4	13.47	+ 3	12.70	15	33.61	+ 2
16	15.85	+ 5	48.26	+ 7	10.88	-2	13.10	+ 6	12.81	10	33.22	+ 5
17	17.68	-1-23	48.11	+ 5	10.94	0	12.73	+ 7	12.93	- 3	32.82	+ 7
18	19.51	+35	47.96	+ 2	11.01	+2	12.36	+ 6		+ 5	32.43	+ 7
19	21.36	+40	47.82	- 2	11.08	+3	11.99	+ 4	13.20	+11	32.04	+ 6
20	23.21	+36	47.68	- 5	11.15	+4	11.62	+ 2	13.35	+16	31.65	+ 3
21	25.07	+25	47.54	8	11.22	+4	11.25	- 2	13.51	+17	31.26	0
22	26.94	+10	47.41	— 8	11.30	+3	10.88	- 4	13.68	+15	30.88	- 3
23	28.82	_ 6	47.28	一 7	11.38	+2	10.52	- 6	13.86	+ 9	30.49	- 5
24	30.71	-19	47.16	- 4	11.46	0	10.16	— 6	14.04	2	30.11	- 6
25	32.60	-27	47.04	— т	11.54	2	9.80	- 4	14.23	— 5	29.73	— 5
26	34.50	-27	46.93	+ 3	_	-3	9.44	_ ₂	14.43	-11	29.35	→ 3
27	36.40	-20	46.83	+ 7		-4	9.09	+ 2	14.64	-15	28.97	+ 1
28	38.31	- 6	46.73	+ 9		<u>-3</u>	8.74	+- 5	14.86	-16	28.59	+ 4
29	40.22	+16	46.63	+10	_	-2	8.39	+ 8	15.09	-12	28.21	+ 7
30	12 TO	+26	46.54	+ 8	11.98	—1	8.04	+ 9		- 7	27.84	+ 9
31	42.13	+38	46.45	+ 5		-+-I	7.69	+ 9		0	27.46	+ 9
April	45.97	+43	46.37	+ 1	1 '	+2	7.35	+ 7		+ 7	27.09	+ 8
2	47.89	+39	46.29	- 3		+3	7.01	+ 4	1 - 0	+13		+ 5
3	49.81	+27	46.22	- 6	1	+4	6.67	0		+16		+ I
	1								1			
4	51.73	+ 9	46.15	- g		+3	6.33	- 5 - 8		+16	1	- 4
5	53.65	12	46.09	— 9 — 8	T	$+2 \\ +1$	5.67	-10	_	+6		-7
7	55.57	31 46	45.98	- 5		-r	5.34	10		_ 2	-	- 9 -10
8	57.49 59.41	-53	45.93	_ 1		-3		- 8		- 9		- 9
									1 ']			
9	61.34	-50	45.88	+ 3		-4	4.69	- 6		-15		- 7
10	63.26	-40	45.84	+ 6		-4		_ 2				- 3
11	65.19	-24		+ 8	_			+ 1				0
12	67.12	- 4	45.77		7 3			+ 5				+ 4 + 6
13	69.04	+16		+ 6			3.5	+ 7	, ,	1		+ 6
14	70.96	_		+ 3			5	+ 7	1 1			+ 7
15					13.72			5				+ 6
16		+38					2.52	1	20.59			+ 4
17		+29			13.97				20.97			+ 1
18	78.59	+-16	45.69	-	14.10	+4		- 3	21.36	+10	21.14	<u> </u>
19	80.49	C	45.70	-2-	8 14.23	+3	1.64	- 5		+12		- 4
20	82.39	-15			_			- 6		+ 5	20.50	- 6
21	84.28				2 14.49	-1	1.06	-	22.56	- 2	20.19	— 5
-	-	1		1	_		II		-	1	1	1
sec 8. tg 8	+-74	1.36	— 74	4.35	+7	.04	-6	.97	+28	3.06	28	3.04

		00	etantis	4 G. 6"		ζ (Octant	is 6 ^m -	5 ^m .	t Oc	tanti	s 6 ^m -	5 ^m .
19	13	AR.	GI.	Dekl.	€1.	AR.	Gl.	Dekl.	GI.	AR.	Gl.	Dekl.	GI.
		1 42 m	in 8 0.01	-85°12'	in 0.01	9 ^h 9 ^m	in 8 0.01	-85° 19′	in 0.01	12 ^h 45 ^m	in 0.01	-84° 39'	in 0.01
A pri	l 21	8.24	+2	22.51	— 5	27.30	+2	15.36	+ 5	51.36	2	19.01	+
P	22	8.24	-2	22.12	— 6		+4	15.51	+ 3	51.31	+1	19.37	+ 6
	23	8.24	-5	21.74	— 5	26.75	+5	15.65	_ I		+4	19.73	+ 4
	24	8.25	-7	21.36	- 2	26.47	+5	15.79	- 5	51.21	+6	20.09	+ :
	25	8.26	-8	20.98	+ 1	26.19	+4	15.92	— 8	51.15	+7	20.45	:
	2 6	8.28	-7	20.60	+ 4	25.91	+2	16.05	-10	51.09	+6	20.80	-
	27	8.30	-5	20.22	+6	25.63	2	16.17	-10	51.02	 -5	21.15	- 1
	28	8.32	-2	19.84	+ 8	25.35	-4	16.29	— 8	50.95	+2	21.50	<u> </u>
	29	8.35	+1	19.46	+ 8	25.07	<u>-6</u>	16.40	— 5	50.88	1	21.85	- 9
	30	8.38	+4	19.08	+ 7	24.79	<u>-7</u>	16.51	— I	50.81	-3	22.19	7
Mai	I	8.42	+-6	18.70	+ 4	24.51	6	16.61	+ 4	50.73	-5	22.53	- 3
	2,	8.46	+7	18.33	— I	24.23	-4	16.71	+ 7	50.65	-6	22.87	+ 1
	3	8.50	+-7	17.96	- 5	23.95	-1	16.80	+ 9	50.57	6	23.21	-+- i
	4	8.55	+5	17.59	8	23.66	+2	16.89	+10	50.48	-4	23.54	+ 8
	5	8.60	+3	17.22	— I O	23.38	-1-5	16.97	+ 8	50.39	-2	23.87	+10
	6	8.65	— I	16.85	r r	23.09	+7	17.05	+ 5		+I	24.20	+11
	7	8.71	-4	16.48	- 9	22.81	+8	17.12	+ 2	-	+4	24.52	+ 5
	8	8.77	6	16.11	- 6	22.53	+8	17.19	- 2	-	+5	24.84	+ 6
	9	8.84	6	15.75	– 2	22.24	+6	17.25	- 5	-	+6	25.16	+ 2
	10	8.91	-5		+ 2	21.96	3	17.30	- 7	49.90	+5	25.47	2
	ΙΙ	8.99	-4		- ⊢ 5	21.68	0	17.35	- 7		+3	25.78	5
	12	9.07	-I		+ 8	21.40	-4	17.40	- 5		+1	26.09	- 7
	13	9.15	+2		+ 8	21.12	6	17.44	_ 3	49.57	-2	26.40	- 7
	14	9.24	+4	-	+ 7	20.84	7		+ 1	49.45	-4	26.70	— 6
	15	9.33	+6		+ 4	20.56	-7		+ 4	49-33	-6	27.00	- 4
	16	9.42	+6	_	+ 1	20.28	-5		+ 6	49.21	-6	27.30	— I
	17	9.52	+5		- 2	20.00	-2	, ,	+ 7	49.09	-5		+ 2
	18	9.62	+3	51	- 5	19.72	+1		+ 6	48.96	-3		+ 4
	19	9.73	0	12.23	- 6	19.44	+3		+ 4	48.83	0		+ 6
	20	9.84	-3	11.89	- 5	19.17	+5		+ I		+3		- - 5
	21	9.95	6	11.56	- 4	18.89	+-5		- 3		+5	28.72	+ 3
	22		-7	11.23	- I		+4	17.53	- 7	48.43		28.99	0
	23		-7		+ 3	18.33	+2	17.52	- 9	48.29	- 11	-	– 3
	24	10.32	<u>-6</u>	٠.		18.06	0		-10	0	+5	29.52	6
	25	10.45	-4	-	+ 8	17.78	-3		- 9		+3	29.78	— 8
	26	10.58	0		+ 9	17.51	-5		- 6	47.86	0	30.03	- 9
	27		+3		+ 8	17.24	-7		- 2	47.71	-3	30.28	— 8
	28	10.85	+6	9.30	+ 5	16.97	-7	17.37	+ 2	47.56	-5	30.53	一 5
	- 1						1.1						

•		Octa	ıntis	20 G. 7	n	Octant	is 2 6	G. 6 ^m -	7 ^m ·)	Octai	ntis 6 ^m .	
19	13	AR.	Œ Gl.	Dekl.	Gl.	AR.	C Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	Gl.
		14 ^h 44 ^m	in 6.01	-87°47′	in	16 ^h 28 ⁿⁱ	in	-86° 12'	in "	18 ^h 4 ^m	5	-87° 39′	
Apri	121	54.60	– 8	57.79	0.01 + 3	32.35	o.o1 — 5	27.66	0.01 + I	16. 2 6	9	46.50	0.01 — I
[/11	22	54.81	_ 2	58.15	+ 6		-3	27.93	+ 5	16.84	- 8	46.64	+3
	23		+ 4	58.51	+ 6		0	28.20	+ 7	17.42	— 5	46.79	+6
	24		+11	58.87	+ 5	_	+ 3		+ 8		0	46.94	+8
	25		+15	59.23	$+\overset{\circ}{3}$		+ 7	28.76	+ 7	18.56	+ 6	47.09	+9
	26	55.55	+17	59-59	0	33.66	+ 9	29.04	+ 4	19.12	+11	47.25	+7
	27		+16	59.95	— 3		+11	29.32	. 0	19.68	+14	47.41	+4
	28		+11	60.31	-6		+ 9	29.60	- 4	_	+15	47.58	0
	29		+ 5	60.68	- 8		+6	29.89	- 6	-	+13	47.75	-4
	30	56.16	- 2	61.04	- 8		+ 2	30.18	— 8	21.32	+ 8	47.93	-7
Mai	I	56.29	- 9	61.40	- 7	34.87	— 2	30.47	8	21.86	+ 2	48.11	9
	2	56.41	-14	61.76	$-\overset{\prime}{5}$	35.10	-6	30.76	- 7	22.39	- 5	48.29	-8
	3	56.52	-16	62.12	0	35.33	9	31.06	— 4		-ri	48.48	-7
	4	56.63	-16		+ 4	35.55	_1o	31.36	0	23.44	16	48.67	4
	5	56.72	-12		+ 8	35.76	- I O	31.66	+ 4		-17	48.86	0
	6		6		+10	35.97	- 7	31.96	+ 8		-16	49.06	+4
	7	56.89	0	-	+10	36.17	-4			24.97	-12	49.26	+7
	8		+ 6		+ 9	36.37	0	_		25.47	- 6	49.46	+9
	9	-	+11		+6		+ 3	32.86	+ 8	-	0	49.67	+8
	ΙÓ		+12		+ 2	-	+ 6	33.17	+ 5		+ 6	49.88	+6
	11		+11	65.00	— 2		+ 7	_	→ I		+10	50.09	+3
	12		+ 7	65.35	_ 6		+ 6	33.79	_ 4	, ,	+11	50.31	—I
	13		+ 2		<u> </u>		+- 4		$-\frac{7}{7}$		+10	50.53	<u></u> 5
	14	57.17	- 3	66.06	_ 8		+ 1	34.41	<u> </u>		+ 7	50.76	$-\tilde{8}$
	15	57.18	- 9	66.42	7	37.63	_ 2	34.73	9	28.77	+ 2	50.99	9
	16		-12	66.77	- 5	37.79	- 5	35.05	- 7	29.22	_ 2	51.22	_8
	17		-12	67.12	— I	37.94	– 6	35.37	_ / _ 4	29.66	$-\tilde{6}$	51.46	_6
	18	57.15	-10	,	+ 2	38.09	- 6	35.69	0	30.09	- 9	51.70	-2
	19	57.12 -	- 5		+ 5	38.24	- 4	-	+ 4	30.52	- 9		+2
	20		+ 2		+ 6	38.38	- 2		+6	30.94	-6	52.18	+5
	21		+ 8		+ 6		+ 2			31.35	_ 2		+8
	22	56.97			+ 4			36.97	+ 7		+ 4	-	- +9
	23	56.91	- 6	_	+ I	38.77				32.15		-	+8
	24	56.84 -		69.53	_ 2	38.89				32.55			+6
	25	56.76 -		69.87	$-\begin{array}{c} -5 \end{array}$		+ 9	37.93		32.93			+2
	26		+ 8	70.21	_ 8			38.26	- 1				
	27		+ o	70.54	— 9 — 9		+ 7 + 4	38.58	- 5 - 8	33.67	+14	53.7° 53.96	$-2 \\ -6$
	28	56.46	- 7	70.87	- 8 - 8	39.31	0	38.91		34.03		54.23	_8
		3	/	//	Ĭ	37.32		39-	7	J1.03	. 1	JT-73	
sec ò, t	gδ	- -26. 0	6	26.0	4	+15.	13	-15.0	9	+24	.53	-24.5	r

\		d	()ctar	ntis 6 ^m .		βΟσ	tanti	s 4 ^m - 5'		τ	Octan	tis 6 ^m .	
19:	13	AR.	Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	CGl.	AR.	C Gl.	Dekl.	Œ Gl.
		19 ^h 22 ^m	in • •	-89° 13′	in 0.01	22 ^h 37 ^m	in 5 0.01	-81°49′	in ". 0.01	23 ^h 15 ^m	in • 0.01	-87° 57'	in
Apri	l 21	24.28	-25	45.73	- 2	14.49	_I	61.06	— 5	22.56	_ 2	20.19	— 5
	22	26.17	28	45.75	+ 2	14.62	-2	60.78	$-\ddot{3}$	22.98	- 9	19.88	- 4
	23	28.05	-23	45.77	+ 6		-3	60.51	0		-14	19.57	— I
	24	29.92	-11	45.80	+ 8	14.89	-4	60.24	+ 4	23.83	-16	19.26	+ 3
	25	31.79	+ 4	45.83	+10	15.03	-3	59.98	+ 7	24.26	-14	18.96	+ 6
	26	33.65	+21	45.87	+ 9	15.17	-2	59.72	+ 9	24.70	- 9	18.66	+ 8
	27	35.51	+35	45.91	+6		0	59.46	+10		- 3	18.36	+ 9
	28	37.36	+42	45.96	+ 3		+2	59.20	+ 8		+ 4	18.07	+ 9
	29	39.20	+42	46.02	- I		+3	58.94	+ 5	26.06	+11	17.78	+ 6
	30	41.03	+34	46.08	— 5		+4	58.70	+ 1	26.52	+15	17.49	+ 2
Mai	1	42.86	+18	46.14	8	15.87	+4	58.46	— 3	26.99	+16	17.21	- 2
	2	44.68	_ 2	46.21	- 9		+3	58.22	- 7		+13		— 6
	3	46.48	-23	46.28	_ g	1 .	+-2	57.98	- 9		+ 8		— 9
	4	48.27	-40	46.36	- 6		0	57.75	IC		+ 1	16.39	_1c
	5	50.06	-51	46.44	- 3		-2	57.52	- 9		— 6	11	— I C
	6	51.83	-53	46.52	+ 1	16.62	-4	57.30	- 7	29.43	-12	15.87	8
	7	53.59	—46	46.61	+ 5		-4	57.08	- 4		-16		- 5
	8	55.34	-31	46.70	+ 7		-4	56.87			-17	_	I
	9	57.08	-12	46.80	+ 8	_	-3	56.66	+ 4	-	-15		+ 3
	10	1 00	+ 8	46.90	+ 7	, ,	-2		+ 6		— g	0.0	+ 5
	11	60.53	+25	47.01	+ 5	1	0	56.26	+ 7		- 1		+ 7
	12	62.24		47.12	+ 1	1	-+-2	-	+ 6		+ 6		+ 7
	13		+38	47.24	- 3			0.0	+ 4		+13		+
	-5 14	1 / /		_	- 6				+ 3	_	$+i\epsilon$		1
	- 15	-	00		8		+4		- 2				<u> </u>
	16			47.62	_ 8						-		
	17	1 .	_						_ 8				
	18	1 ' -			_ 2	0		1	_ 6		+ 1	55	_ 6
	19	1 '	_			18.66			- 2	1 /			-
	20				+ 4					36.92			_
	21	1 ' - '		1	+ '					37.49			+ :
						19.15				38.06		-	+
	23		+15		+ !			J .	+ 9				+ 3
	24 25		+30 +41		+ '				+10	37			+ 9
	26					19.80			+				+
	27	80.00	+38		-				+		1		+ 4
	28	87.52	+ 25	49.52		7 20.13	+4	53.65	1	41.54	+10	11.35	1
sec 8	, tg ð	+7	4.39		.38	+7	.04	<u>6</u>	.97	+28	8.01	-27	.99

		00	etantis	4 G. 6	n •	ζ.	Octant	is 6^{m}	5 ·	ı Oct	antis	s. 6 ^m - 5	, m
191	3	ΛR.	C Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	« Gl.
		1 ^b 42 ^m	in 8 0.01	-85° 12′	in 	9 ^h 9 ^m	in 0.01	-85° 19′	in 0.01	12 ^h 45 ^m	in 8 0.01	-84° 39′	in 0.01
Mai	28	10.85	+6	9.30	+- 5	16.97	-7	17.37	+ 2	47.56	<u>-5</u>	30.53	- 5
	29	10.99	+7	8.99	+ I	16.70	-5	17.32	+ 6	47.41	-6	30.77]
	30	11.14	+7	8.68	- 3	16.43	-3	17.27	+ 9	47.25	6	31.01	+ :
	31	11.29	+-6	8.37	- 7	16.17	+1	17.21	+10	47.09	-5	31.24	+
Juni	I	11.44	+4	8.07	<u>–</u> 9	15.91	+4	17.15	+ 9	46.93	-3	31.47	+10
	2	11.59	0	7.77	11	15.65	+6	17.08	+ 7	46.77	0	31.69	+1
	3	11.75	-3	7.48	10	15.39	+8	17.01	+ 3	46.61	+3	31.91	+10
	4	11.91	-5	7.19	- 7	15.13	+8	16.93	0	46.44	+5	32.13	+ 8
	5	12.07	-6	6.91	- 4	14.87	+7	16.85	- 4		+6	32.34	+ 4
	6	12.24	-6	6.63	0	14.61	+4	16.76	— 6	46.10	+6	32.54	C
	7	12.41	-5	6.35	+ 4	14.36	+1	16.66	- 7	45.93	+4	32.74	- 4
	8	12.58	-2	6.07	+ 6	14.11	-2	16.56	6		+2	32.94	6
	9	12.76	+1	5.80	+ 8	13.86	-5	16.46	- 4	45.58	—I	33.13	<u> </u>
	10	12.94	+4	5.54	+ 7	13.61	7	16.35	— I	45.40	-3	33.31	_ (
	II	13.12	+6	5.28	+ 5	13.37	-7	16.24	+ 3	45.22	− 5	33.49	5
	12	13.31	+6	5.02	+ 2	13.13	-5	16.12	+ 6	45.04	-6	33.67	- 2
	13	13.50	+-6	4.77	— I	12.89	-3		+ 7	44.85	-6	33.84	+ 1
	14	13.69	+4	4.52	- 4	12.65	0	15.87	+ 7	44.67	-4	34.00	+ -
	15	13.88	+1	4.28	- 6	12.41	+2	15.74	+ 5	44.48	I	34.16	+ 5
	16	14.08	-2	4.04	— 6	12.18	+4	15.60	+ 2	44.29	+1	34.32	+ 5
	17	14.28	-5	3.81	- 4	11.95	+5	15.46	- 2		+4	34.47	+ 4
	18	14.48	-7	3.58	— 2	11.72	+5	15.31	- 6	43.91	+6	34.61	+ :
	19	14.68	-8	3.35	+ I	11.49	+3	15.16	- 8		+7	34.75	- 3
	20	14.89	− 7		+ 5 + 8	11.27	+1	15.00	-10	.000	+6	34.88	_ {
	21	15.10	-5	2.92		11.05	-2		10	43.33	+4	35.01	
	22	15.31	-2	•	+ 9	10.83	<u>-5</u>	14.67	- 8	43.14	+2	35.13	— è
	23	15.52	+2		+ 8	10.61	<u>-7</u>	14.50	- 4	42.94	-I	35.25	- 9
	24	-	+5		+ 6	10.40	-7	14.33	0	42.74	-4	35.36	- 6
	25 26	15.96	+7		+ 3 - I	10.19	6	14.15	+ 4 + 8	42.54	-6	35.47	— <u>:</u>
			+7	1.91		9.98	-4			42.34	-6	35.57	- -]
	27	-	+7	1.72	- 5	9.78	-1		+ 9	42.14	6	35.66	+ 5
	28	_	+5	٠, ر	8	9.58	+3	5 5	+ 9	41.94	-4	000	+- 8
	29		+2	٥,	—IO	9.38			+ 8	41.73			+10
Juli	30		—I	1.20	—ю — 8	9.19	+7 +8		+ 5 + 1	41.53			+10
- (11		17.31	-4	1.03							+4		+ 9
	2	, , ,	-6	0.87	— <u>5</u>	8.81	+8	12.78	— 3	41.12		_	+ 6
	3		-6		— I	8.63	+6		— <u>5</u>	40.91			+ 2
	4	18.00	- 5	0.57	+ 2	8.45	+3	12.35	- 7	40.71	1-5	36.17	2

	1-	Oct	antis	20 G. 7	n	Octan	tis 26	G. 6 ^m —	7 ^m -	χ	Octant	is 6 ^m .	
191	3	AR.	« Gl.	Dekl.	Gl.	AR.	Gl.	Dekl.	Œ G1.	AR.	GI.	Dekl.	∝ GI.
		14 ^h 44 ^m	in 8 0.01	-87° 48′	in " "	16 ^h 28 ^w	in 8 0.01	-86° 12′	in 0.01	18 ^h 4 ^m	in o.or	-87° 39′	in
Mai	28	56.46	- 7	10.87	8	39.31	0.01	38.91	— 9	34.03	+ 4	54.23	-8
	29	56.34	-13	11.20	→ 5	39.40	5	39.23	– 8	34.38	— 2	54.50	<u>-9</u>
	30	56.21	16	11.53	- I	39.48	- 8	39.56	— 5	34.72	- 9	54.77	8
	31	56.07	16		+ 3	39.56	-10	39.88	— I	35.06	-14	55.04	— 5
Juni	I	55.93	-14	12.18	+ 7	39.64	-10	40.21	+ 3	35.38	-17	55.31	— I
	2	55.78	— 9		+ 9	39.71	- 9	40.53	+ 6		-17	55.59	+3
	3	55.62	- 2	1	+10	37 / /	– 6	40.86	+ 9	36.01	-14	55.87	+6
	4	55.45	+ 4	_	+10	27 2	- 2	41.18	+10		- 1	56.15	⊣-8
	5	55.27	+ 9		+ 7		+ 2	41.51	+ 9		- 3	56.43	+9
	6	55.08	+12		+ 4		+ 5	41.83	+ 6			56.71	+7
	7	54.89	+12		0	3771	+ 7	42.16	+ 2	1 3, ,		57.00	+4
	8	54.69	+ 9		- 4		+ 6	42.48	- 2	1 2,		57.29	- - I
	9	54.48	+ 4		- 6	(' '	+ 5	42.80	- 6	37.7	1 [1	57.58	-3
	11	54.26	— 2 — 8		-8 - 8		+ 2	43.12	- 8	2, , ,	+ 9 + 4	57.87 58.16	7 8
		54.03		,		1 1	- I	43.44	- 9	1	1 11		
	12	53.80	-11		- 6	1 '	- 4	43.76	- 8	J		58.46	<u> </u>
	13	53.56	-13		— 3		6 6	1.1	- 5			58.76	-7
	14 15	53.31	-11		+ I + 4			1 1 1	— 2 — 2	1 -	1	59.06 59.36	4
	16	52.78	- 7 - 1		+ 4	1	-5 -3		+ 5		-	59.66	+4
	17 18	52.51 52.23	+12	11	+ 6	' '	0	1001	+ 7			59.96 60. 2 6	+7
	19	51.94		.11	+ 5		+ 4+7	1	+ 8			60.56	+8
	20	51.64		, ,	— I		+-10		+ 3	1		60.86	+6
	21	51.34			4	1 ' ~	+10		, c		1 '	61.17	1-1-3
	22	51.03	-		_ 7		+ 8	_	_ 4			61.47	
	23	50.71			9		+ 5		- 7		-	61.77	-2
	24	50.39		0	- 9			11	8				
	25	50.06			6		- 3		_ 8			- 0	
	26	49.72			- 3	39.72	- 7		- 6		_	62.69	-8
	27	49.37	-16	19.52]	39.65	- 9	48.40	- 3	40.85	-12	62.99	(
	28			1	-+- !			0 =	+ 3	, ,			<u> </u> -:
	29	1 '2			+ 8				-+- 4				+
	30			20.20	10							63.91	+
Juli	1	47.91	+ 2	20.42	+10				+10	41.15	; —II	64.22	+
	2	47.53	+ '	20.64	+ 8	39.23		49.85	+	41.20	- 5	64.53	+
	3	47.15	+1:	20.85	+	0. 0	+ 4			41.25	; + 1	64.84	+
	4		+13	21.06	+			. 11	+ 4	41.28	+ 7	65.15	+
sec ō,	to 8	-1-26	6.10	— 2 6	8		5.14	_r	C.TT	+2	4.56	—24.	51

- 1.		σ	Octar	ntis 6 ^m .		β Ос	tanti	s 4 ^m – 5	m	τ	Octan	tis 6 ^m .	
191	3	AR.	Gl.	Dekl.	Œ Gl.	AR.	GI.	Dekl.	C Gl.	AR.	Gl.	Dekl.	Gl.
		19 ^h 23 ^m	in 6 0.01	-89° 13′	in 0.01	22 ^h 37 ^m	in s 0.01	-81°49′	in 01	23 ^h 15 ^m	in 0.01	-87° 57′	in 0.01
Mai	28	27.52	+25	49.52	— 7	20.13	+4	53.65	0	41.54	+16	11.35	0
	29	28.96	+ 6	49.71	- 9	20.30	+-3	53.54	— 5	42.13	+15	11.20	- 4
	30	30.38	-15	49.90	9	20.46	+2	53.44	 8	42.72	+11	11.05	_ 8
	31	31.79	-34	50.09	- 7	20.63	O	53.34	-10	43.32	+ 4	10.91	-10
Juni	1	33.18	-47	50.29	- 4	20.79	-2	53.25	10	43.92	- 3	10.78	-10
	2	34.54	—53	50.49	0	20.96	-3	53.16	8	44.52	-10	10.65	- 9
	3	35.88	-49	50.69	+ 3	21.12	4	53.08	— 5	45.12	-14	10.53	- 6
	4	37.20	-38	50.90	+ 6	21.29	4	53.00	_ r	45.73	-17	10.41	- 3
	5	38.50	-20	51.11	+ 8	21.45	4	52.93	+ 2	46.33	-13	10.30	- - I
	6	39.78	0	51.33	+ 7	21.62	-3	52.86	+ 5	46.94	-11	10.19	+ 4
	7	41.04	+20	51.55	+ 5	21.79	_I	52.80	+ 6	47.55	- 5	10.09	+ 6
	8	42.28	+31	51.77	+ 2	21.96	+-I	52.74	+ 6		+ 3	9.99	+ 7
	9	43.50	+37	52.00	- I	22.12	+-3	52.69	+ 5	48.77	+10	9.90	+ 5
	10	44.69	+35	52.23	— 5	22.29	+4	52.65	+ 2	49.38	+15	9.82	+ 3
	11	45.86	+25	52.46	- 7	22.46	+4	52.61	I	49.99	+17	9.74	0
	12	47.02	-+- I I	52.69	_ 8	22.63	+3	52.57	- 4	50.60	+15	9.67	- 3
	13	48.15	- 5	52.93	_ 8	22.79	+2	52.54	_ 6	_	+-10	9.60	- 5
	14	49.25	-18	53.17	- 5	22.96	- - I	52.52	_ 6	51.82	+ 3	9.54	- 6
	15	50.33	-25	53.41	_ ī	23.12	_r	52.50	- 5	52.43	- 4	9.48	— 5
	16	51.39	-28	53.65	+ 3	23.29	-3	52.49	- 2	53.05	-10	9.43	- 3
	17	52.42	-21	53.90	+ 6	23.45	-4	52.48	+ r	53.66	_15	9.38	0
	18	53.43	_ 8	54.15	+ 9		-4	52.48	+ 5	54.27	_16	9.34	+ 4
	19	54.42	+ 9	54.41	+10	_	-3	52.49	+8		-13	9.31	+ 7
	20	55.38	+-25	54.67	+ 9		_I	52.50	+ 9	- ,	_ 8	9.28	+ 9
	21	56.32	+38	54.93	+ 6		+1	52.52	+10	56.11	 I	9.26	+10
	22	57.23	+44	55.19	+ 2	24.26	+2	52.54	+ 8	56.72	+ 6	9.24	+ 9
	23	58.11	+42	55.45	_ 2		+3	52.57	+ 5		+12	9.23	+ 6
	24	58.97	+32	55.72	_ 6		+4	52.60	+ 1		+16	9.23	+ 2
	25	59.81	+15	55.99	_ 8		+4	52.64	- 4		+16	9.23	_ 2
	2 6	60,62	- 7	56.26	- 9	24.90	+3	52.68	- 7		+13	9.23	— 6
	27	61.40	-26	56.53	- 8	25.06	+I	52.73	— 9	59.74	+ 7	9.24	- 9
	28	62.16	-42	56.81	_ 6	, ,	_ī	52.78	_IC		0	9.26	-10
	29	62.89	-52	57.09	_ 2		-3	52.84	<u> </u>			9.28	-10
	30	63.59	<u>-52</u>		+ 2		-4	52.91	_ 6			9.31	— 8
Juli	I	64.27	-43	57.65	+ 5		-4	52.98	- 3			9.35	- 4
	2	64.92	-28	57.94	+ 7			53.05	I			9.39	0
	3	65.54	— 8 — 8		+ 8		-4 -3	53.13	+ 4			9.43	+ 3
	4	66.14	+11	_	+ 7		-2		+ 6				+ 5
	7			٠,٠,٠	' '		_	55		39		JT	,
sec ô,	tg ð	+74	.55	—74	54	- -	04	-6	.96	+27	7.99	-27	97

		Oct	tantis	4 G. 6 ^m		ζ(etant	is $6^m - \frac{1}{2}$, m	ı Oc	tanti	s 6 ^m -5	, m
191	13	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	Œ Gl.	AR.	Œ G1.	Dekl.	Gl.
		1 42 m	in s 0.01	-85° 11'	in 0.01	9 ^h 9 ^m	in 	-85°19′	in 0,01	12 ^h 45 ^m	in o.or	-84° 39′	in "o.or
Juli	4	18.00	-5	60.57	+ 2	8.45	+3	12.35	— 7	40.71	+5	36.17	- 2
0	5	18.24	$\left -\frac{3}{3} \right $	60.42	+ 6	8.27	-1	12.13	_ 6	40.50	+3	36.22	- 5
	6	18.48	0	60.28	+ 7	8.10	-4	11.91	— <u>5</u>	40.29	0	36.27	- 7
	7	18.72	+3	60.15	+ 8	7.93	6	11.69	— 2	40.08	2	36.31	- 7
	8	18.96	+5	60.02	+ 6	7.77	-7	11.46	+ 2	39.88	-5	36.34	- 6
	9	19.20	+6	59.90	+ 3	7.61	-6	11.22	+ 5	39.67	-6	36.37	— 3
	10	19.44	+6	59.78	0	7.45	-4	10.98	+ 7	39.46	-6	36.39	C
	11	19.68	+-5	59.67	- 3	7.29	-2	10.74	+ 7	39.25	— 5	36.41	+ 3
	12	19.92	+2	59.57	— 5	7.14	+1	10.49	+ 7	39.04	-3	36.42	+ 5
	13	20.17	-I	59-47	– 6	6.99	+4	10.24	+ 4	38.83	0	36.43	+ 6
	14	20.42	-4	59-37	— 5	6.85	+5	9.99	0	38.62	+3	36.43	+ 5
	15	20.66	-6	59.29	- 3	6.71	+-5	9.74	- 4	38.41	+5	36.42	+ 3
	16	20.91	-8	59.21	0	6.58	+4	9.48	— 7	38.20	+6	36.41	— I
	17	21.16	-8	59.13	+ 4	6.45	+2	9.22	- 9	37.99	+-6	36.39	- 4
	18	21.41	-6	59.06	+ 6	6.32	— 1	8.96	-10	37.78	+-5	36.37	- 7
	19	21.66	-3	59.00	+ 8	6.19	-4	8.70	– 9	37.58	+3	36.34	- 9
	20	21.91	0	58.94	+ 9	6.07	6	8.43	6	37.37	0	36.30	- 9
	21	22.16	+4	58.89	+ 7	5.95	-7	8.16	2	37.17	一3	36.26	- 8
	22	22.41	+6	58.84	+ 4	5.84	<u> 一</u> 7	7.89	+ 2	36.96	-5	36.22	— 5
	23	22.67	+-8	58.80	+ 1	5.73	-5	7.61	+ 6	36.76	6	36.17	+ I
	24	22.92	+7	58.77	- 4	5.63	-2	7.33	+ 9	36.55	6	36.11	+ 4
	25	23.17	+5	58.74	- 7	5.53	$+\mathbf{I}$	7.05	+10	36.35	-5	36.05	+ 7
	2 6	23.42	+3	58.71	-10	5.44	+4	6.77	+ 8	36.15	-2	35.98	+10
	27	23.67	-1	58.69	-11	5.35	+7	6.48	+ 6	35.95	0	35.91	+11
	2 8	23.92	-3	58.68	- 9	5.27	+8	6.19	+ 3	35.75	+3	35.83	+ 9
	2 9	24.17	— 5	58.68	— 7	5.19	+8	5.90	I	35.55	+5	35.74	+ 7
	30	24.42	6	58.68	— 3	5.11	+6	5.61	- 4	35.35	+6	35.65	+ 3
	31	24.67	-6	58.69	+ 1	5.04	+4	5.32	<u></u> — 6	35.16	+5	35.56	- I
Aug.	1	24.92	-4	58.71	+ 4	4.97	0	5.03	- 7	34.96	+4	35.46	- 4
	2	25.17	-1	58.73	+ 7	4.91	-3	4.74	一 5	34.77	+1	35.35	- 6
	3	25.41	+2	58.75	+ 8	4.85	-5	4.44	- 3	34.57	$-\mathbf{I}$	35.23	- 7
	4	25.66	+4	58.78	+ 7	4.80	-6	4.14	0	34.38	-4	35.11	— 6
	5	25.90			+ 4	4.75	-7	3.84	+ 4	34.19	-6	0	- 4
	6	26.15	+6	58.86	+ 1	4.71	-5	3.54	+ 6	34.00	-6	34.85	— I
	7	26.39	+6	58.91	— 2	{ 4.67 4.63	-3	3.24 2.94	+ 7	33.81	-5	34.72	+ 2
	8	26.64	+3	58.97	- 5	4.60	+3	2.64	+ 5	33.63	3	34.59	+ 4
	9	26.88		59.03	— 6	4.57	+5	2.33	+ 1	33.45	-1	34.45	+ 6
	10	27.12	-3	59.09	– 6	4.55	+6	2.03	— 2	33.27	+2	34.30	+ 5
sec δ, 1	ta à	+11	1.05	—II.	OI	+12		—12.	2.1	+10.	75	-10	70

				20 G. 7				G. 6 ^m -				tis. 6 ^m .	_
191	13	AR.	Œ Gl.	Dekl.	« Gl.	AR.	∝ Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	« Gl.
	ī	14 ^h 44 ^m	in 6 0.01	-87°48′	in 0.01	16 ^h 28 ^m	in 0.01	-86° 12′	in 01	18 ^b 4 ^m	in 0.01	-87°40'	in o.ot
Juli	4	46.76	+12	21.06	+ 1	39.02	+ 6	50.41		41.28		5.15	+6
	5		+10	21.26	<u> </u>	_	+ 7	50.69		41.30		5.45	+2
	6		+ 6	21.46	-6		+ 6	50.97		41.31		5.76	-3
	7	45.55	0	21.65	— 8		+ 3	51.24	— 7	1		6.06	-6
	8	45.14	— 6	21.83	8		0	51.51		41.31		6.37	-8
	9	44.72	-r 1	22.01	— 7	38.43	— 3	51.77	8	41.29	1 +	6.67	-9
	10	44.30	-13	22.19	- 4	38.29	- 5	52.03	- 6	41.26	- 4	6.97	8
	11	43.87	-12	22.36	0	38.15	- 6	52.29	— 3	41.23	_ 8	7.27	-5
	12	43.44	-9	22.52	+ 3		6	52.54	0	41.18	- 9	7.57	-2
	13	43.00	— 4	22.68	+ 5	37.85	- 4	5 2. 79	+ 4	41.13	- 9	7.87	+2
	14	42.56	+ 3	22.84	+ 6		— I	53.04	+ 7		- 5	8.17	+6
	15	42.11	+10	22.99	+ 6	37.54	+ 3	53.29	+ 8	41.00	0	8.46	+8
	16		+14	23.13	+ 4					40.91		8.76	+9
	17	41.20	+17	23.27	+ 1	٠.	+ 9	53.77	+ 4	40.82	+11	9.05	+8
	18	40.74	+16	23.41	- 3	36.94	+10	54.01	+ 1	40.72	+14	9.35	+5
	19	40.27		23.54	6		+ 9	54.25	- 3	40.61	+16	9.64	+1
	20	39.80	+ 7	23.66	— 8	36.68	+ 7	54.48	6			9.93	-3
	21	39.33	— I	23.78	- 9			54.71	- 8	40.36	+10	10.22	-6
	22	38.85	_ 8	23.90	— 7		- I	54.93	— 9	40.22	+ 4	10.51	-8
	23	38.37	-13	24.01	— 5	36.10	- 5	55.15	- 7	40.08	- 3	10.79	<u>-9</u>
	24	37.89	-16	24.11	— I	35.90	- 8	55.36	- 4	39.92	-10	11.07	一7
	25	37.40	16	24.21	+ 4	35.70	10	55.57	— I		- 1 5	11.35	-4
	2 6	36.91	-13	24.30	+ 7	35.49	-10	55.77	+ 3	39.58		11.63	0
	27	36.42	- 7	24.39	+10		— 8	55-97	+ 7		-16	11.90	+4
	28	35.93	— I	24.47	+10	35.06	— ₅	56.16	+ 9	39.21	-13	12.17	+7
	29	35.43	+ 5	2 4.54	+ 9		- I	0 00		39.01	- 8	12.44	+8
	30	34.93	+10	24.61	+ 7					38.81		12.71	+9
	31	34.43	+12	24.68	+ 3		+ 5			38.59		12.97	1- 7
Aug.		33.93	+11	24.74	- I		+ 6			38.36		13.23	+4
	2	33.42	+ 8	24.79	– 5		+ 6		— 3			13.49	0
	3	32.91	+ 3	24.83	- 7	33.68				37.89		13.74	-4
	4	32.40	— 3	24.87	- 8	33.44	+ 1			37.64		13.99	一 7
	5	31.89	- 9		— 7		— 2			37.38		14.24	-9
	6	31.38			— 5		4	57.7I		37.11		14.48	-8
	7	30.87	-13	24.95	<u> </u>	32.69	— 6	J.	- 4	36.84	i	14.72	<u>-6</u>
	8	30.35	11		+ 2	_	- 7		- I			14.96	-3
	9	29.84	— 6		+ 5		— 5	58.14		36.27		15.19	+1
	10	29.33	0	2 4.99	+ 6	31.92	_ 2	58.27	+ 6	35.97	— 7	15.42	+5
sec δ,	tg δ	+26	.13	-26.	11	-+-15	.15	—15.	12	+2	4-59	-24.	57

1014		σ	Octa	ntis 6 ^m .		βОс	tanti	s. 4 ^m – 5	m.	τ	Octar	itis. 6 ^m .	
1913		AR.	Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Gl.	AR.	Gl.	Dekl.	Gl.
		19 ^h 24 ^m	in 0.01	-89° 13′	in ".01	22 ^h 37 ^m	in s 0.01	-81°49′	in 0.01	23 ^h 16 ^m	in o.ox	-87° 57′	in "0.01
Juli	4	6.14	+11	58.51	+7	26.12	-2	53.22	+ 6	3.89	_ 8	9.48	+ 5
	5	6.71	+26	58.80	+4	26.27	0	53.31	+ 6		0	9.54	+ 6
	6	7.24	+35	59.09	0	26.42	+2	53.40	+ 5		+ 8	9.60	+ 6
	7	7.75	+36	59.38	-4	26.57	+3	53.50	+ 3		+13	9.67	+ 4
	8	8. 2 4	+29	59.68	- 7	26.71	+4	53.61	0	6.20	+16	9.74	+ 1
	9	8.70	+17	59.97	-8	26.85	-+4	53.72	— 3	6.77	+16	9.82	_ 2
	10	9.12	+ 1	60.27	-8	26.99	+3	53.83	- 5	7.33	+13	9.90	— 4
	II	9.52	-14	60.56	6	27.13	$+\mathbf{I}$	53.95	— 6	. , ,	+ 6	9.99	— 5
	12	9.89	25	60.86	-3	27.27	—I	54.08	— 6	8.44	— I	10.08	— 6
	13	10.23	-29	61.16	+1	27.41	2	54.21	- 4	8.99	- 8	10.18	- 4
2	14	10.54	-25	61.46	+5	27.54	3	54.34	0	9.54	-13	10.28	— т
1	15	10.82	-14	61.76	+8	27.67	-4	54.48	+ 4	10.08	-16	10.39	+ 2
]	16	11.08	+ 1	62.06	+9	27.80	-3	54.63	+ 7	10.62	-15	10.50	+ 6
1	7	11.31	+19	6 2 .36	+9	27.93	2	54.78	+ 9	11.15	-10	10.62	+ 8
- 1	81	11.50	+34	62.66	+7	28.06	0	5 4.93	+10	11.68	- 4	10.75	+10
1	19	11.67	+43	62.96	+4	28.19	+2	55.09	+ 9	12.20	+ 4	10.88	+ 9
2	20	11.81	+45	63.26	0	28.31	- ⊢3	55.25	+ 6	12.71	+10	11.02	+ 7
2	21	11.92	+39	63.56	-4	28.43	+4	55.42	+ 2	13.22	+15	11.16	+ 4
2	22	12.00	+23	63.87	-7	28.55	+4	55.59	- 2	13.72	+16	11.30	0
2	23	12.05	+ 3	64.18	9	28.67	+3	55.77	<u> </u>	14.22	+15	11.45	— 5
2	24	12.07	-18	64.48	-9	28.79	+2	55.95	- 9	14.71	+10	11.61	8
2	25	12.06	36	64.78	-7	28.90	0	56.13	-10	15.19	+ 3	11.77	-10
2	26	12.03	48	65.08	-3	29.0I	-2	56.32	- 9	15.67	- 5	11.93	-10
	27	11.97	-53	65.38	0	29.12	-3	56.51	- 7	16.14	-12	12.10	— 8
2	28	11.87	-47	65.68	+4	29.23	-4	56.71	— 4	16.61	-16	12.27	6
2	29	11.74	-35	65.98	+7	29.34	-4	56.91	0	17.07	— 1 8	12.45	<u> </u>
3	30	11.59	-17	66.27	+8	29.44	-4	57.12	+ 3	17.52	-15	12.63	+ 2
	31	11.41	+ 3	66.57	+7	29.54	2	57-33	+ 5	17.96	-10	12.82	+ 5
Aug.	1	11.19	+20	66.87	+5	29.64	0	57.54	+ 7	18.40	— 3	13.01	+ 6
	2	10.95	+32	67.17	+2	29.74	+2	57.76	+ 6	18.83	+ 5	13.21	+ 6
	3	10.68	+36	67.46	—2	29.84	+3	57.98	+ 4	19.25	+11	13.41	+ 5
	4	10.38		67.75	-6	29.93	+-4	58.21	+ 1		+16	13.62	+ 2
	5	10.05		68.04	-8	30.02	+4	58.44	— 2	20.07	+17	13.83	— 1
	6	9.69	+ 7	68.33	-8		+3	58.67	- 5			14.04	— 3
	7		- 9	68.62	- 7	,	+2	58.90	– 6			14.26	— 5
	8	8.90	-22	68.91	— 5	30.28	0	59.14	— 6	21.24	+ 2	14.48	- 6
	9	8.45	—28	69.19	—ī	30.36	—2	59.38	— 5			14.71	– 5
	ó	7.98		69.48	+3	30.44	-3	59.63	— 2		-11	14.94	-3
sec ō, tg	8	+74.	85	—74.8	34	-+7.0	- 11	—6. 9	97	+ 28.	00	-27.9	98

	00	etanti	s 4 G. 6	m.	ζ(ctant	is 6 ^m -5	, m	: 0	ctant	tis 6 th —	5 ^m ·
1913	AR.	Œ G1.	Dekl.	Gl.	AR.	Gl.	Dekl.	Gl.	ΛR.	Gl.	Dekl.	Gl.
	1 42 m	in 5 0.01	-85° 11′	in 0.01	9 9 m	in s o.or	-85° 18′	in 0.01	12 ^h 45 ^m	in 8 0.01	-84° 39	in 0.01
Aug. 10	27.12	— 3	59 09	_ 6	4.55	+6	62.03	_ 2	33.27	+2	34.30	+ 5
11	27.36	-6	59.16	- 4	4.54	+5	61.72	_ 6	33.09	+5	34.15	+ 4
12	27.60	-7	59.24	— I	4.53	+3	61.42	- 9	32.92	+6	33.99	+ 1
13	27.84	8	59.32	+ 2	4.52	0	61.11	-10	32.75	+7	33.83	- 3
14	28.08	-7	59.41	+ 6	4.52	-3	60.81	- 9	32.58	+6	33.66	- 6
15	28.31	-4	59.50	+ 8	4.52	-5	60.50	— 7	32.41	+4	33.49	_ 8
16	28.54	I	59.60	+ 9	4.53	-7	60.20	— 3	32.24	- -I	33.31	- 9
17	28.77	+-2	59.71	+ 8	4.54	-7	59.89	+ 1	32.07	-2	33.13	- 9
18	29.00	+5	59 82	+ 6	4.56	-6	59-59	+ 5	31.91	4	32.94	6
19	29.22	+7	59.94	+ 2	4.58	-3	59.28	+ 8	31.75	6	32.75	_ 2
20	29.44	+7	60.07	— 2	4.61	0	58.98	+ 9	31.59	-6	32.55	+ 2
21	29.66	+-6	60.20	- 6	4.64	+3	58.67	+9	31.44	-5	32.35	+ 6
22	29.88	+4	60.33	- 9	4.67	+6	58.37	+7	31.29	-3	32.14	+ 9
23	30.10	+1	60.47	-10	4.71	+8	58.07	+ 4	31.14	1	31.93	+10
24	30.32	-2	60.62	— I O	4. 76	+8	57.76	0	30.99	+-2	31.72	+10
25	30.53	-4	60.77	— 8	4.81	+7	57.46	- 3	30.85	+4	31.50	+ 8
26	30.74	-6	60.92	- 5	4.87	+5	57.16	6	30.71	+6	31.28	+ 5
27	30.95	6	61.08	— I	4.93	+2	56.86	-7	30.57	4-6	31.05	+ I
28	31.15	-5	61.25	+ 3	4.99	2	56.56	— 6	30.43	+5	30.82	— 3
29	31.35	-2	61.42	+ 6	5.06	-4	56.26	- 4	30.30	+2	30.58	5
30	31.55	+1	61.59	+ 7	5.13	6	55.97	— I	30.17	0	30.34	- 7
31	31.75	+3	61.77	+ 7	5.21	- 7	55.68	+ 2	30.04	-3	30.10	– 6
Sept. 1	31.94	+6	61.96	+ 5	5.29	6	55.39	+ 5	29.92	<u>_</u> 5	29.86	- 5
2	32.13	+7	_	+ 3	5.38	-4	55.10	+ 7	29.80	-6	29.61	_ 2
3	32.32	+6	62.34	— I	5-47	-r	54.82	+ 7	29.68	-6	29.36	+ I
4	32.51	+4	62.54	- 4	5.57	+2	54.54	+ 6	29.57	-4	29.11	+ 4
5 !	32.69	+2	62.75	- 6	5.67	+4	54.26	+ 3	29.46	-2	28.86	+ 5
6	32.87	2	62.96	-6	5.78	+5	53.98	- I		+1	28.60	+ 6
7 8	33.04	-5	63.17	[−] 5	5.89	+5	53.70	- 5	29.26	+4	28.34	+ 5
	33.21	-7	63.38	_ 2	6.00	+4	53.43	— 8		+6	28.07	+ 2
9	33.38	-8		+ I	6.12	+1	53.16	-10		+7	27.80	- I
10	33.54	-7	_	+ 4	6.25	-2	52.89	-10		+6	27.53	- 5
II		-5		+ 7	6.38	4	-	- 8	28.88	- 11	27.26	- 8
12		-2 -+1	-	+ 9 + 9	6.51 6.65	6 7		— 5 — 1	28.80 28.72	+2 -1	26.98 26.70	— 9 — 9
		1										
14		+4		+ 7	6.79	-7		+ 3		3	26.42	- 7
15		+6		+ 4	6.93	5		+7	28.58	-5 6	26.14	- 4
16	34.45	+7	65.29	0	7.08	-2	51.34	+ 9	28.51	6	25.86	0
sec o, tg o	+11.	95	-11.	91	- -12	.25	—12.	20	+10.	74	-10.	70

	Octa	ntis 2	20 G. 7"		Octan	tis 26	G. 6 ^m -	7 ^m •	7	Octai	ntis 6 ^m .	
1913	AR.	Œ Gl.	Dekl.	Gl.	AR.	Gl.	Dekl.	Œ GI.	AR.	Gl.	Dekl.	Gl.
	14 ^h 44 ^m	in 9 0.01	-87°48′	in 0.01	16 ^h 28 ^m	in s o.o1	-86°12′	in 0.01	18 ^h 4 ^m	in 0.01	-87° 40'	in ".
Aug. 10	29.33	0	24.99	+ 6	31.92	— 2	58.27	+ 6	35.97	- 7	15.42	+5
11	28.81	+ 7	24.99	+ 6	31.66	+ 1	58.40	+ 7	35.67	- 3	15.65	+7
12	28.30	+13	24.98	+ 5	31.40	+ 5	58.52	+ 7	35.36	+ 3	15.88	+9
13		+16	2 4.97	+ 2	2	+ 8	58.64		35.04	+ 9	16.10	+-8
14	27.27	+17	24.95	2	30.86	+10	58.75	+ 3	34.71	+13	16.32	+6
15	26.76	+14	24.93	一 5	30.59	+10	58.86	— I	34.38	+16	16.53	+3
16		+ 9	24.90	8	7 7	+ 8	58.96	— 5	34.04		16.74	1
17		+ 3	24.86	- 9		+ 5	59.06	- 8	33.69	- 1	16.94	-5
18	25.22	- 5	24.82	- 8	1 , , ,	+ 1	59.15	- 9	33.33	+ 6	17.14	-8
19	24.71	-11	24.77	— 6	2 9.47	- 3	59.23	— 8	32.97	0	17.34	-9
20	24.20	-15	24.72	— 2	29.19	- 7	59.31	6	32.60	- 7	17.53	8
21	23.69	16	24.66	+ 2		 9	59.38	— 2	32.23	-13	17.71	-6
22	23.18	-14	24.60	+ 6		-10	59.45	+ 2	31.85	-16	17.89	-2
23	22.68	-10	24.53	+ 9		- 9	59.51	+ 6		-17	18.07	+2
24	22.18	— 3	24.45	+10		— 6	59.57	+ 8		-14	18.25	$+\epsilon$
25	21.68	+ 3	24.37	+10	, , ,	- 3	59.62	+10	30.66	-10	18.42	+-8
26	21.19	+ 8	24.28	+ 8	, ,	+ 1	59.66	+ 9	30.25	- 4	18.58	+9
27 28	'	+11	24.19	+ 4		+ 4	59.70	+ 7	29.84	+ 2	18.74	+-8
29	20.21	I2	24.09	_ 2		+ 6 + 6	59.73	+ 3	29.43	+ 7	18.90	+ 5
	19.72	+ 9	23.98	— 3			59.75	— I	29.01	+10	19.05	+1
30	19.24	+ 5	23.87	6		+ 5	59-77	— 5	28.58	+11	19.19	-3
Sept. 1	18.76 18.28	I	23.76	$-8 \\ -8$	1	+ 2	59.79	- 8	28.15	+ 8	19.33	6 8
Sept. 1	17.81	- 7 -11	23.64 23.51	-6	,	— I	59.80 59.81	- 9 - 8		+ 5	19.46	
3	17.34	-13	23.38	- 3	, ,	- 3 - 6	59.81	-6		- 5	19.59	一 万
					_				_			
4	16.88	—12 — 8	23.24	+ 1	24.80	-7 - 6	59.80	- 2	26.38	- 8	19.83	-4
5 6	15.97	-3	23.10 22.95	+ 4 + 6		— 4	59·79 59·77	+ 2 + 5	25.93 25.47	—ro	19.94 20.04	— 1 — 4
7	15.52	+ 4	22.79	+ 6	1	0	59.74	+ 7	25.0I	— ₅	20.14	+6
8	15.08	+11	22.63	+ 5		+ 4	-	+ 8		+ 1	20.24	+8
0	Ĩ.											
9	14.64	+15 + 17	22.47 22.30	+ 3		+7 + 9	59.68 59.64		24.08 23.61	$+7 \\ +12$	20.33	+5
11	13.78	'		— 4		_			23.14	1	20.41	+4
12	13.36			- 7			32 32		22.66			(
13	12.95			$-\frac{7}{9}$		+ 6					20.63	
14	12.54		21.58	- 9		+ 3		_ 8			_	
15	12.14		21.39	一 7	1	– 2		- 9				
16	11.74		21.19	- 5				- 8		_	20.79	-9
sec δ, tg δ	+26	.12	—26 .	II	+15	.16	—15	.12	+2/	4.62	24.0	60

	J 0	Octan	tis 6 ^m .			etanti	s 4 ^m -	5 m.	τ	Octan	tis 6 ^m .	
1913	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Gl.
	19 ^h 23 ^m	in	-89° 14′	in "	22 ^h 37 ^m	in	-81° 49′	in	23 ^h 16 ^m	in	-87° 57′	in
Aug. 10	67.98	0.01 -28	9.48	3	30.44	o.o1	59.63	0.01 2	21.97	0.0I — I I	14.94	- 3
. 11	67.48	-19	9.76	+ 7	30.51	-4	59.88	+ 2	22.33	-15	15.17	+ 1
12	66.95	$-\begin{vmatrix} 2 \\ 4 \end{vmatrix}$	10.04	+ 9	30.58	-3	60.13	+ 6	22.67	-15	15.41	+ 4
13	66.39	+13	10.31	+10	30.65	-2	60.38	+ 8	23.01	I 2	15.65	+ 7
14	65.81	+29	10.59	+ 8	30.72	— 1	60.64	+10	23.34	- 7	15.89	+ 9
15	65.20	+41	10.86	+ 5	30.79	+-1	60.90	+ 9	2 3.66	+ 1	16.14	+10
16	64.57	+46	11.13	+ 1	30.85	+3	61.16	+ 7	23.97	+ 8	16.39	+ 8
17	63.90	+42	11.40	- 3	30.91	+4	61.42	+ 4	24.27	+13	16.64	+ 5
18		+30	11.67	— 6	30.97	+4	61.69	0	24.56	+16	16.89	+ 1
19	62.50	+12	11.93	- 8	31.02	+4	61.96	- 4	2 4.84	+16	17.15	— 3
20	61.76	_ g	12.19	— 9	31.07	+3	62.23	— 8	25.11	+12	17.41	- 7
21	60.99	-29	12.45	- 7	31.12	+1	62.50	10	25.37	+ 6	17.68	- 9
22	60.20	-44	12.70	— 5	31.17	1	62.77	-10	25.62	— 2	17.95	-10
23	59.38	-52	12.95	— I	31.21	-3	63.05	— 8	25.86	— 9	18.22	9
24	58.53	-50	13.20	+ 3	31.25	-4	63.33	— 5	26.09	$-\mathfrak{r}_5$	18.49	— 7
25	57.66	-41	13.44	+ 6	31.29	-4	63.61	— 2	26.31	-17	18.77	3
26	56.77	-24	13.68	+ 7	31.33	4	63.89	+ 2	26.52	-17	19.05	o
27	55.85	- 5	13.91	+ 8	31.36	-3	64.18	+ 5	26.72	—13	19.33	+ 4
28	54.91	+14	14.14	+ 6	31.39	-1	64.46	+ 6	26.91	- 6	19.61	+ 6
29	53.94	+28	14.37	+ 3	31.42	+1	64.75	+ 6	27.09	+ 2	19.90	+ 6
30	52.95	+35	14.60	— т	31.44	+3	65.04	+ 5	27.26	+ 9	20.18	+ 5
31		+34	14.82	- 4	31.46	+4	65.33	+ 2	27.42	+14	20.47	+ 3
Sept. 1		+25	15.04	- 7	31.48	+4	65.62	- I	27.56	+17	20.76	0
2		+12	15.25	— 8	31.50	+4	65.91	- 4	27.70	+16	21.05	- 3
3	48.75	- 4	15.46	— 8	31.51	+2	66.20	→ 6	27.82	+11	21.34	— 5
4	47.65	_17	15.66	- 6	31.52	+1	66.50	— 6	27.94	+ 5	21.64	6
5	46.53	-27	15.86	— 2	31.53	$-\mathbf{r}$	66.79	— <u>5</u>	28.04	- 3	21.93	— 6
6	45.39	-29	16.06	+ 2	31.53	-3	67.09	— 3	28.14	- 9	22.23	— 4
7	44.23	-23	16.25	+6	31.53	-4	67.38	0	28.22	-14	22.53	— т
8	43.04	-11	16.44	+ 8	31.53	-4	67.68	+ 4	28.29	16	22.83	+ 3
9	41.84	+ 6	16.62	+ 9	31.53	-3	67.97	+ 7	28.34	-14	23.13	+ 6
10		+-23	16.80	$+\stackrel{\cdot}{9}$		-2	68.27	+ 9	0	- 9		+ 9
11		+38	16.97	+ 6	31.51	0	68.56	+10		– 2	23.73	+10
12		+46	17.14	+ 3	31.50	+2	68.85	+ 9		+ 5	24.04	+- 9
13	36.83	+45	17.30	— 1	31.48	+3	69.15	+ 6		+12	24.34	+ 7
14	35.54	+37	17.46	— 5	31.46	+4	69.44	+ 2	28.46	+16	24.64	+ 3
15		+15	17.61	— <u>8</u>		+4	69.73	- 2	28.45	+17	24.95	- I
16	32.91	0	17.76	— 9	31.42	+3	70.02	— 6		+14	25.25	— 5
sec ô, tg ô	+75.	12	75.	11	+7.0		—6.	07	+28.	.03	-28.0	o I
, 08	I ' ' ' ' ' '	_	13.		• 7.0	7	5.	7/	1 20.	-5	20.	

70-		Oct	tantis	4 G. 6 ^m		ζ 0	ctantis	$6^{m}-5^{m}$		ı Oct	tantis	s 6 ^{nι} – 5	m.
191	3	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	Œ Gl.	AR.	GI.	Dekl.	Œ Gl.
		1 42 m	in 6.01	-85° 12'	in 01	9 ^h 9 ^m	in 8 0.01	-85° 18′	in " 10.0	12 ^h 45 ^m	in s	-84° 39′	in
Sept.	16	34.45	+-7	5.29	0	7.08	-2	51.34	+ 9	28.51	-6	25.86	C
•	17	34.59	+7	5.55	- 4	7.24	+2	51.10	+ 9	28.44	6	25.57	+ 4
	18	34.72	-+-5	5.81	- 8	7.40	+5	50.86	+8	28.38	-4	25.28	+ 8
	19	34.85	+2	6.07	-10	7.56	+7	50.62	+ 5	28.33	2	24.99	+10
	20	34.97	I	6.33	-10	7.72	+8	50.38	+ 2	28.28	+1	24.69	+10
	21	35.09	-4	6.60	- 9	7.89	+8	50.15	— 2	28.23	+4	24.39	+ 9
	22	35.21	一 5	6.87	— 6	8.06	+6	49.93	- 5	28.19	⊣ -5	24.10	+ 6
	23	35.32	<u>-6</u>	7.14	— 2	8.24	+3	49.71	6	28.15	+6	23.80	+ 2
	24	35.43	5	7.42	+ 2	8.42	0	49.49	6	28.11	+5	23.50	- 3
	25	35.53	-3	7.70	+ 5	8.61	-3	49.28	一 5	28.08	+3	23.20	- 4
	26	35.63	-1	7.98	+ 7	8.80	-5	49.07	- 2	28.06	+1	22.90	- 6
	27	35.72	+2	8.26	+ 7	8.99	6	48.86	+ 1	28.04	-2	22.60	- '
	28	35.81	+5	8.55	+ 6	9.18	-6	48.66	+ 4	28.02	-4	22.30	- (
	2 9	35.89	+6	8.84	+ 4	9.38	-4	48.46	+ 7	28.01	-6	21.99	-
	30	35.97	+6	9.13	0	9.58	-2	48.27	+ 8	28.00	-6	21.69	
Okt.	I	36.05	+5	9.43	- 3	9.79	+1	48.08	+ 7	28.00	- 5	21.38	-+-
	2	36.12	+3	9.73	- 5	10.00	+3	47.90	+ 4	28.00	-3	21.08	+
	3	36.19	0	10.03	- 6	10.21	+5	47-73	+ 1	28.00	0	20.78	4-
	4	36.25	-3	10.33	— 6	10.42	+6	47.56	- 3	28.01	+3	20.47	+
	5	36.31	6	10.63	- 3	10.64	+4	47.39	- 7	{28.03 28.05	+5 +6	19.86	- -
	6	36.36	8	10.94	0	10.86	+2	47.23	- 9	28.07		19.56	
	7	36.41	8	11.24	+ 3	11.08	0	47.08	-10	28.10		19.25	
	8	36.45	-6	11.55	+ 6	11.30	-3	46.93	- 9	28.13	_	18.95	_
	9	36.49	-4	11.86	+ 9	11.53	-6	46.78	- 7	28.16	0	18.65	I
	10	36.52	0	12.17	+ 9	11.76	-7	46.64	- 3	28.20	-3	18.35	-
	11	36.55	+3	12.48	+ 8	11.99	-7	46.51	+ 2	28.25	-5	18.05	_
	12	36.57	+6	12.79	+ 5	12.23	-6	46.38	+ 6		-6	17.75	-
	13	36.59	+7	13.10	+ 2	12.47	-3	46.26	8			17.45	+
	14	36.60		13.41	— 2	12.71	0	46.15	+ 9			17.16	+
	15	36.61	+6	13.72	— 6	12.95	+-4	46.05	+ 9	28.48	-3	16.86	
	16	36.62		14.03	- 9	13.20		45.95	+ 6	28.55		11	+1
	17	36.62		14.34	— I C	13.45	+-8	45.85	+ 3			11	+
	18		-	14.66	-10	13.70				28.69			+
	19		_		- 7	13.95	+7	45.68	- 4				+
	20	36.58	6	15.29	- 4	14.20	+4	45.60	- 6	28.86	+	15.42	
	21	100		15.61	0	14.45	+1	45.52	- 7	28.95	5 +4		-
	22	36.53	3 -4	15.92	+ 4	14.71	_2	13			+	14.86	-
	23			16.24	+ 6					29.14	1 -	0	
sec ò,	tg ô	-1-1	1.96	<u>-1</u>	1.91	-+-3	2.24	_I	2.20	+1			0.69

7074	Oct	antis	20 G. 7	*.	Octant	is 2 6	G. 6 ^m -	7"·	χ	Octan	tis 6 ^m .	
1913	AR.	GI.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	GJ.	AR.	Œ Gl.	Dekl.	∝ Gl.
	14 ^h 44 ^m	in 6.01	-87°48'	in 0.01	16 ^h 28 ^m	in 8 0.01	86° 12′	in 	18 ^h 4 ^m	in s 0.01	-87°40′	in "0.01
Sept. 16	11.74	-14	21.19	5	21.26	- 6	59.27	- 8	20.73	- 4	20.79	-9
17	11.35	-16	20.99	0	20.97	- 9	59.19	- 4	20.24	10	20.84	-7
18	10.97	15	20.79	+ 5	20.68	-10	59.10	0	19.75	-15	20.88	<u>-3</u>
19	10.59	-11	20.58	+ 8	20.39	- 9	59.00	+ 4		1 7	20.91	0
20	10.22	— 6	20.36	+10	20.11	— 7	58.90	+ 7	18.77	-16	20.93	+4
21	9.86	0	20.14	+10	19.83	- 4	58.80	+ 8	18.28	-12	20.95	+7
22	9.51	+ 6	19.91	+ 9	19.55	0	58.69	+10		_ 6	20.96	+9
23	9.17	+10	19.68	+ 6	19.27	+ 3	58.57	+ 8		0	20.97	+8
24	8.83	+12	19.45	+ 2	18.99	+ 5	58.45	+ 5	16.80	+ 5	20.97	+6
25	8.50	+10	19.21	- 2	18.72	+ 6	58.32	I	16.30	+ 9	20.97	+3
26	8.18	+ 6	18.97	- 5	18.45	+ 5	58.18	— 3	15.81	+10	20.96	_I
27	7.87	+ 1	18.73	- 7	18.18	+ 3	58.04	- 7	_	+ 9	20.94	-5
28.	7.56	5	18.48	- 8		+ 1		- 8		+ 6	20.02	-8
29	7.26	-10	18.23	- 7	17.65	- 3		- 8		+ 1	20.89	-9
30	6.97	13	17.97	- 4		- 5		7		- 4	20.85	<u>8</u>
Okt. 1	6.69	-13	17.71	_ I		- 6		- 4		- 7	20.81	_6
2	1 - 1	-10	17.45	+ 3	1 00	_ 6	3, .5	0	2 2 2	_IO	20.76	-2
3		- 5		+ 5				+ 4	1	- 9	20.71	+2
4	1	+ 2		+ 6				+ 6	22	_	20.65	+5
5		+ 8		+ 6				+ 7			20.58	+8
6								1	0.0			
7	7 13	+14		+ 4	1 1	1 '		+ 7			20.51	+9 +8
8		+17 + 17		- 3		1		+ 5	1	1	20.35	+5
9	1 . //	+14	1	- 6				_ 2	1		20.26	+-2
10		+ 9		8	-			- 6	1 2 1		20.17	-2
			1	1	1			1				
11		+ 2		<u> </u>				- 8	0 ''		20.07	
12	1	- 6		- 8			222.	- 9 - 8			19.96	
13		-I2		2					, -	0	19.05	S
14 15	0 /	-15 -16		+ 3			(0)		200		19.73	-
_							li .				1	
16	,	-13		+ 6	1 ,		5	+ 3				-:
17		- 8		+ 9	13.52			+ 6			19.34	+
18		- 2		+10				+ 9		-13	1	+6
19		+ 4		+10						-8		
20	3.21	+ 9		+ 7		+:		+ 9		_ 2		+
21		+11		+ 4		+ !		+ (+ 3		+
22		-+-II		(+ (+		+8		
23	3.00	+ 8	11.38	2	12.46	+ (52.73	-	3.13	+10	18.42	(
seco, tgò	+-2	6.11	-26	.00	-+-I	5.15	-I	5.12	+2	24.62	-24	.60

	σ	Octan	tis 6 ^m .		βОс	tanti	s 4 ^m -5	, m ,	τ	: Oc t ar	ntis 6 ^m .	
1913	AR.	Œ Gl.	Dekl.	Gl.	AR.	Gl.	Dekl.	€ Gl.	AR.	Gl.	Dekl.	GI.
	19 ^h 22 ^m	in .0.01	-89° 14′	in o.or	22 ^h 37 ^m	in o.c.i	-81°50′	in 	23 ^h 16 ^m	in 8 0.01	-87° 57′	in 0.01
Sept. 16	92.91	0	17.76	<u>-9</u>	31.42	+3	10.02	6	28.43	+14	25.25	- 5
17	91.57	-21	17.90	-8	31.39	+2	10.31	— 9	0	+ 9	25.56	_ 8
18	90.21	-38	18.04	-6	31.36	0	10.60	-10		+ 1	25.86	-10
19	88.84	-49	18.17	2	31.33	1	10.89	- 9	28.30	- 6	26.16	1C
20	87.46	<u>-52</u>	18.30	+1	31.29	4	11.17	— 6	28.24	-13	26.4 6	8
21	86.06	-45	18.42	+5	31.25	-4	11.46	<u> </u> з	28.16	-17	26.76	<u> </u>
22	84.65	-31	18.54	+7	31.21	-4	11.74	0	28.07	-17	27.06	I
23	83.22	—21	18.65	+8	31.17	-3	12.02	+ 3	27.97	14	27.36	+ 2
24	81.78	+ 6	18.75	+7	31.12	-2	12.30	+ 5	27.86	- 9	27.66	+ 5
25	80.33	+22	18.85	+4	31.07	0	12.58	+ 6	27.73	– 2	27.96	+ 6
2 6	78.87	+32	18.94	+1	31.02	+2	12.86	+ 5	27.60	+ 6	28.25	+ 6
27	77.40	+35	19.02	-3	30.97	+3	13.14	+ 3	27.45	+12	28.55	+ 4
28	75.93	+29	19.10	-6	30.91	+4	13.41	+ 1	27.30	+16	28.84	+ 1
29	74.44	+17	19.17	8	30.85	+4	13.68	- 3	27.13	+16	29.13	- 2
30	72.95	+ 1	19.24	-8	30.79	+3	13.95	— <u>5</u>	2 6.95	+13	29.42	- 4
Okt. 1	71.45	14	19.31	— 7	30.72	+1	14.22	— 6	26.76	+ 7	29.71	_ 6
2	69.95	25	19.37	-4	30.65	0	14.48	- 6	26.56	+ 1	30.00	_ 6
3	68.44	30	19.42	0	30.58	-2	14.74	4	26.35	- 7	30.29	- 5
4	66.92	-26	19.47	+4	30.51	-3	15.00	— 1	26.13	12	30.57	_ 2
5	65.39	-16	19.51	+7	30.44	-4	15.26	+ 3	25.89	-15	30.85	+ 2
6	63.86	0	19.54	+9	30.36	-3	15.51	+ 6	25.65	-15	31.13	+ 5
7	62.32	+17	19.57	+9	30.28	2	15.76	+ 9	25.39	-11	31.41	+ 8
8	60.78	+-34	19.59	+-8	30.20	0	16.01	+10		- 5	31.68	+10
9	59.24	+44	19.60	+-5	30.12	+1	16.25	+9	24.85	+ 2	31.95	+10
10	57.70	+47	19.61	$+\mathbf{I}$	30.03	+-3	16.49	+ 7	2 4.57	+ 9	32.22	+ 8
11	56.16	+42	19.61	-4	29.94	+4	16.72	+ 3	24.27	+14	32.49	+ 5
12	54.61	+28	19.61	-7	29.85	+4	16.95	— 1	23.97	+16	32.75	+ 1
13	53.06	+ 9	19.60	-9	29.76	+3	17.18	— 5	23.65	+15	33.01	- 3
14	51.51	-13	19.58	-9	29.66	+2	17.41	- 8	23.33	+11	33.26	- 7
15	49.96	-2 6	19.55	-7	29.56	0	17.63	10	22.99	+ 4	33.51	- g
16	48.42	46	19.52	4	29.46	-2	17.85	- 9	22.65	- 4	33.76	-10
17	46.88	-52	19.48	0	29.36	-3	18.06	- 8	22.29	-10	34.01	- g
18	45.34	49	19.44	+4	29.26	-4	18.27	— 5	21.93	-15	34.25	- 6
19	43.81	-37	19.39	+6	29.15	-4	18.47	— 1	21.55	-17	34.49	- 3
20	42.28	-20	19.34	+8	29.04	-4	18.67	+ 2	21.17	-16	34.72	+ 1
21	40.75	0	19.28	+8	28.93	2	18.86	+ 5	20.78	-11	34.95	+ 4
22	39.23	+17	19.22	+5	28.82		19.05	+ 6		- 4	35.17	+ 6
23	37.72		19.15	- <u>+2</u>	28.71		19.23	+ 6		+ 3	35.39	-+- 6
sec δ, tg δ	+75	5.28	—75·	27	+7.	64	6.	97	+ 28	.07	-28	5.05

To T		Ос	tantis	3 4 G. 6 ⁿ		ζ (ctant	is 6 ^m – 5	m .	t Oc	tantis	$6^{m}-5^{m}$	
191	3	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Gl.	Dekl.	Gl.
		1 42 m	in %	-85° 12'	in 0.01	9 ^h 9 ^m	in s 0.01	-85° 18'	in 	12 ^h 45 ^m	in .0.01	-84° 39′	in o.or
Okt.	23	36.50	-2	16.24	+ 6	14.97	<u>-5</u>	45.39	- 3	29.14	— I	14.58	_ '
	24	36.47	- - -I	16.55	+ 7	15.23	-6	45.34	0	29.24	-3	14.31	
	25	36.43	+4	16.86	+ 6	15.49	- 7	45.29	+ 3	29.35	-5	14.04	,
	26	36.38	+6	17.17	+ 4	15.75	5	45.25	+ 6	29.46	6	13.77	_
	27	36.33	+7	17.48	+ 1	16.01	-3	45.22	+ 8	29.58	6	13.50	+-
	28	36.27	+6	17.79	- 2	16.27	0	45.19	+ 7	29.70	-4	13.23	+
	29	36.21	+4	18.10	- 4	16.53	+3	45.16	+ 5	29.82		12.97	+
	30	36.15	+1	18.41	6	16.80	-+-5	45.14	+ 2	29.94	$+\mathbf{I}$	12.71	+
	31	36.08	-2	18.72	- 6	17.06	+6	45.13	— 2	30.07	+4	12.46	+
Nov.	1	36.00	- 5	19.02	- 4	17.33	+5	45.12	- 6	30.21	+6	12.21	+
	2	35.92	-7	19.32	— 2	17.59	+3	45.12	- 9	30.35	+7	11.96	
	3	35.84	-8	19.62	+ 2	17.86	+1	45.13	-10	30.49	+6	11.71	
	4	35.75	-7	19.92	+ 5	18.12	-2	45.15	10	30.64	+4	11.47	
	5	35.66	-5	20.21	+ 8	18.39	-5	45.18	- 8	30.79	+2	11.24	— I
	6	35.56	-2	20.50	+ 9	18.66	-7	45.21	- 5	30.95	-1	11.01	-
	7	35.46	+1	20.79	+ 9	18.93	-7	45.24	0	31.11	-4	10.78	
	8	35-35	+4	21.08	+ 7	19.20	6	45.28	+ 4	31.27	6	10.56	_
	9	35.24	+6	21.37	+ 3	19.46	4	45.33	7	31.44	-6	10.34	+
	10	35.12	+7	21.65	I	19.73	-1	45.39	+ 9	31.61	-5	10.12	+
	11	35.00	+6	21.93	- 5	19.99	+2	45.45	+ 9	31.78	-3	9.91	+
	12	34.87	+4	22.21	_ 8	20.26	+5	45.52	+ 7	31.96	— I	9.71	+1
	13	34.74	+2	22.48	-10	20.52	+7		+ 4	32.14	+2	9.51	+1
	14	34.61	— I	1	10	20.79	+8	45.68	+ 1	32.32	+4	9.31	+
	15	34.47	4		8	21.05	+7		- 3	32.51	+5	9.12	+
	16	34.32	-6	23.28	- 5	21.31	+5	45.87	- 5	32.70	+6	8.93	+
	17	34.17	6	, , ,	- 2	21.57	+2		- 7		+5	8.75	-
	18	34.02	-5		+ 2	21.83	—I		- 6	33 7		8.57	_
	19	33.87	-3	24.06	+ 5	22.09	-4		- 4	33.29		8.40	-
	20	33.71	0	24.31	+ 7	22.35	6		— I	33.49		8.24	
	21	33.55	+3	24.55	+ 7	22.61	6	46.44	+ 2	33.70	-5	8.08	
	22	33.38	+5	24.79	+ 5	22.86	6	' '	+ 5			7.92	-
	23	33.21	+7		+ 3	23.11	-4	46.72	+ 7			7.77	+
	24	33.03	+6	25.26	0	23.36	1		+ 8		-5	7.63	+
	25	32.85	+5		- 3	23.61	+2		+ 6			7.49	+
	26	32.67	+2	25.72	5	23.86	+4	47.19	+ 4	34.77	C	7.36	+
	27	32.48	_I	1	6	24.10	+5	47.35	C	1 3.77		7.23	+
	28	32.29	4	26.15	- 5	24.34	+5	47.52	4		+5	7.11	+
	2 9	32.10		26.36	- 3	24.58	+4	47.70	- 8	35.44	+6	7.00	-
sec ò,	to 8	- + ·T	1.97	-r:	1.02	-4-1	2.24	T	2.20		7.72	-10	5.68

		Oct	antis	20 G. 7°		Octan	tis 2 6	G. 6 ^m -	7 ^m +		(Octai	ntis 6^{m} .	
191	3	AR.	Gl.	Dekl.	ŒJ.	AR.	Œ Gl.	Dekl.	Œ Gl.	AR.	Œ Gl.	Dekl.	Œ Gl.
		14 ^h 44 ^m	in	-87°48′	in	16 ^h 28 ^m	in	-86° 12′	in	18 ^h 3 ^m		_87°40′	in 0.01
Okt.	23	3.00	0.01	11.38	0.01 — 4	12.46	0.01 + 6	52.73	0.01 —2	63.13	0.0I +IO	18.42	0.01
OKt.	24	2.95	+ 3	11.07	7	12.30	+ 4	52.47	5	62.71	+10	18.25	-3
	25	2.91	- 3	10.76	– 8	12.15	2	52.21	8	62.30	+ 7	18.07	7
	26	2.89	8	10.45	- 7	12.00	_ 2	51.94	9	61.89	+ 3	17.89	<u>8</u>
	27	2.88	12	10.14	- 5	11.86	- 4	51.67	-7	61.50	– 2	17.70	<u></u> -9
	28	2.88	-13	9.83	- 2	11.73	_ 6	51.40	- 5	61.11	- 7	17.51	-7
	29	2.89	12	9.52	+ 2	11.60	- 7	51.12	$-\mathbf{I}$	60.73	-10	17.31	4
	30	2.91	- 7	9.21	+ 4		- 6	50.84	+2	60.35	-10	17.11	С
	31	2.94	- T	8.90	+ 6		3	50.56	+-5	59.98	- 8	16.90	+4
Nov.	1	2.99	+ 6	8.59	+ 6	11.25	+ 1	50.27	+7	59.61	- 4	16.69	+7
	2	3.05	+12	8.28	+ 5	11.15	+ 4	49.98	+8	59.25	+ 2	16.47	+9
	3	3.11	+16	7.97	+ 2		+ 8	49.69	+6	58.90	+ 8	16.25	+8
	4	3.18	+17	7.66	— 1	10.95	+10	49.40	+3	58.56	+13	16.02	+-6
	5	3.26	+16	7.36	- 5		+10	49.11	0	58.23	+16	15.79	+3
	6	3.36	+ 11 + 4	7.05 6.74	-8 - 9	10.78	+ 9	48.81	-4	57.90	+16	15.55	— I
	7	3.59	- 3	6.43	— 9		+ 6	48.51	− 7	57.58	+13	15.31	-5
	8	3.72	- 9	6.12	- 8	10.63	+ 2	48.21	-9	57.27	+ 8	15.06	-7
	9	3.87	-14	5.82	— 3	10.57	- 2	47.91	-8	56.97	+ 2	14.81	9
	10	4.03	16	5.52	+ 1	-	- 6	47.61	-6	56.68	- 5	14.56	8
	II	4.19	14	5.22	+ 5	10.46	- 9	47.30	<u>-3</u>	56.39	-12	14.30	-6
	12	4.37	-11	4.92	+ 8	10.42	10	46.99	+1	56.11	-15	14.04	-3
	13	4.56	4	4.62	+10	10.39	- 9	46.69	+5	55.84	16	13.77	+1
	14	4.75	+ 2	4.32	+10	10.36	6	46.38	+8	55.58	-r5	13.50	+-5
	15	4.96	+ 7	4.03	+ 8	10.33	- 3	46.07	+9	55.33	11	13.23	+8
	16	5.18	+11	3.74	+ 5	10.31	0	45.76	+9	55.09	- 5	12.96	+9
	17	5.41	+12	3.45	+ 1	10.30	+ 3	45.45	+7	54.86	+ I	12.68	+-8
	18	5.65	+10	3.16	- 2	10.30	+ 5	45.14	+4	54.64	+ 6	12.40	+-6
	19	5.90 6.16	+ 5	2.88 2.6 0	- 6	10.30	+ 6	44.83	0	54.42	+ 9	12.11	+2
	20 21	6.43	- 1 - 7	2.32	- 7 - 7	10.31	+ 5 + 3	44.51 44. 2 0	$-4 \\ -7$	54.21 54.02	+8 + 8	11.53	2
					_ 6		3		8				8
	22	6.72	-11	2.04 1.76		22	0	43.88	8	53.83	+ 4	11.24	— c
	23 24	7.02	—13 —12		_	10.38		43.57 43.25		53.65 53.48	0	10.94 10.64	9 8
	25	7.33 7.65				10.41		43.25	-3			10.34	5
	2 6	7.97				10.50		42.62	+1	53.18		10.04	I
	27	8.30	+ 3	0.69	+ 7			42.31	+4	53.05	- 9	9.73	+2
	28		+10			10.62		42.00	+7	52.92		9.42	+6
	29	9.00		0.18				41.69	+8	52.80	-	9.11	+8
sec δ, 1	gô	+2 6.	.07	26.	05	- -15.	14	—15.1	I	+24	ı.61	-24.5	59

103		σ	Octan	itis 6 ^m .		βΟσ	ctanti	s 4 ^m - 5	nı	τ	Octant	tis 6 ^m .	
191	13	AR.	GI.	Dekl.	Gl.	AR.	Œ Gl.	Dekl.	∝ Gl.	AR.	α Gl.	Dekl.	Gl.
		19 ^h 21 ^m	in 6 0.01	-89° 14'	in 	22 ^h 37 ^m	in .0.01	-81°50′	in 0.01	23 ^h 16 ^m	in 0.01	-87° 57′	in o.or
Okt.	23	97.72	+29	19.15	2	28.71	+1	19.23	+ 6	19.97	+ 3	35.39	-1- 6
	24	96.21	+34	19.07	2	28.60	+3	19.41	+ 4	19.55	10	35.61	+ 5
	25	-	+31	18.98	— 5	28.48	+4	19.59	+ 1	19.12	15	35.82	+ 2
	26	93.22	+25	18.89	-8	28.36	+4	19.76	- 2	18.69	+16	36.03	3
	27	91.74	+ 7	18.79	- 9	28.24	+3	19.93	- 5	18.25	+15	36.23	- 4
	28	90.27	- 9	18.69	8	28.12	+2	20.09	_ 6	17.80	- -IO	36.43	- 6
	29	88.81	-22	18.58	- 5	28.00	0	20.25	— 7	17.34	+ 3	36.63	- 7
	30	87.35	-29	18.46	2	27.88	-2	20.40	- 5	16.88	- 4	36.82	6
	31	85.91	29	18.34	+ 2	27.76	-3	20.55	— 2	16.41	-11	37.00	3
Nov.		84.48	-21	18.21	+ 6	27.63	4	20.69	- - 1	15.93	-15	37.18	C
	2	83.06	- 7	18.08	+ 9	27.50	4	20.83	+ 5	15.44	15	37.35	+ 4
	3	81.65	+11	17.94	- - 10		-3	20.96	+ 8		-13	37.52	+ 7
	4	80.26	+28	17.79	+ 9	27.24	I	21.08	+10	14.45	_ 8	37.68	+ 9
	5	78.88	+42	17.64	+ 6	27.11	+1	21.20	+10		_ I	37.84	+10
	6	77.52	+47	17.48	2	26.98	+2	21.31	8	13.43	+ 7	37.99	+ 9
	-	76.17				26.85		1				38.14	
	7 8		+46	17.32	- 2 6	26.72	+3	21.42	+ 5	12.91	13	38.28	+ 7
		74.84	+35	17.15 16.98	6 8	26.59	+4	21.52	- - 1	12.39	- -16 - -16	38.42	-+ 3
	9	73.52	+17 - 4	16.80		26.45	+4	21.71	- 3 - 7	11.32	+13	38.55	- 6
	11	70.94	-24	16.61	- 9 - 8	26.31	+3 +1	21.79	- 9	10.78	+ 7	38.68	_ ç
		69.68						21.86				38.80	
	12	68.43	-41	16.42 16.22	— 5	26.18	I		10 8	9.68	— 8	38.91	10
	13	67.20	-50 53	16.02	− 2 + 2	26. 04 25.9 0	-3	21.93	- 6	9.00	— 6 —14	39.02	- 9
	14	66.00	-51	15.81		25.76	4	22.06	- 2	8.56	- 17	-	7
	15 16	64.81	-42 -27	15.60	5 7	25.62	-4 -4	22.11	+ 1	7.99	17	39.12 39.22	4
						-							
	17	63.65	- 9	15.38	+ 8	25.48	-3	22.16	+ 4		-14	39.31	-t- 3
	18	62.51	+ 9	15.16	+ 6	25.34	I	22.20	+ 6	,	- 8	39.39	
	19	61.39	+25	14.93	+ 4	25.20	0	22.24	+ 6		0	39.47	+ 6
	20	60.29	+33	14.70	0	25.06	+2	22.27	+ 5	5.69	+ 8	39.54	+ 5
	21	59.21	+33	14.46	- 4	24.92	+3	22.29	+ 2	5.11	+13	39.60	4- 3
	22		+25	14.22	- 7		+4	22.31	- 1		+16	39.66	(
	23	57.13		3 /	8	. 1		22.32			+16	39.71	- 3
	24	56.13		13.73		24.49		22.33	6			39.75	- 5
	25	55.14				24.34	11	22.33	-7		+ 6	39.79	- 6
	26	54.18	-28	13.22	- 3	24.20	-1	22.32	— 6	2.15	— I	39.82	6
	27	53.25	-30	12.95	+ 1	24.06	-2	22.30	- 4	1.55	— 8	39.85	4
	28	52.34	-2 6	12.68				22.27	0			39.87	
	29	51.46	-13	12.41				22.24	+ 4		-	39.88	
sec 8,	0.0	+75.	20	75	10	+7	.04	-6.	70	-1-28	.10	-28.	00

		00	tantis	4 G. 6	n •	66	ctant	is 6^m	5 -	t Oct	tantis	$6^{m}-5$	
191	3	AR.	Gl.	Dekl.	CGl.	AR.	Gl.	Dekl.	Œ Gl.	AR.	GI.	Dekl.	Gl.
		1 42 m	in e o.oi	-85° 12'	in 01	9 ^h 9 ^m	in 8 0.01	-85° 18′	in o.or	12 ^h 45 ^m	in s o.oi	-84° 39′	in 0.01
Nov.	20	32.10	6	26.36	- 3	24.58	+4	47.70	- 8	35.44	+6	7.00	
	30	31.90	-8	26.57	+ 1	24.82	+2	47.88	-10	35.67	+6	6.89	5
Dez.	I	31.70	-7	26.77	+ 4	25.06	I	48.07	-10	35.90	+5	6.78	_ 8
	2	31.49	_6	26.97	+ 7	25.29	-4	48.27	- 9	36.13	+3	6.68	-
	3	31.28	-3	27.16	+ 9	25.52	-6	48.47	-6	36.37	0	6.59	-1
	4	31.07	0	27.35	+10	25.75	-7	48.67	2	36.61	3	6.51	:
	5	30.86	+3	27.53	+ 8	25.98	-7	48.88	+ 2	36.85	5	6.43	
	6	30.64	+6	27.70	+ 5	26.20	-5	49.10	+ 6	37.09	-6	6.36	_
	7	30.42	+7	27.87	+ 1	26.42	-2	49.32	+ 8	37.33	-6	6.29	+
	8	30.20	+7	28.04	3	26.64	+1	49-55	+ 9	37.57	-4	6.23	+
	9	29.98	+5,	28.20	7	2 6.86	+4	49.78	+ 8	37.82	2	6.17	+-
	10	29.75	+3	28.35	9	27.07	+7	50.02	+ 6	38.07	$+\mathbf{I}$	6.12	+1
	II	29.52	0	28.50	-10	27.28	+8	50.27	+ 2	38.32	+3	6.08	+
	12	29.29	-3	28.65	- 9	27.48	+8	50.52	I	38.57	+5	6.04	+
	13	29.05	-5	2 8.79	- 7	27.68	+7	50.77	- 5	38.82	+-6	6.01	+
	14	28.81	6	28.92	— 3	27.88	+4	51.03	- 6	39.07	+5	5.99	
	15	28.57	-5	29.05	+ I	28.07	0	51.30	— 6	39.32	+4	5.97	-
	16	28.33	-4	29.17	+ 4	28.26	-3	51.57	- 5	39.57	+1	5.96	-
	17	28.08	-r	29.28	+6	28.45	-5	51.85	- 2	39.83	2	5.95	-
	18	27.83	+2	29.39	+ 7	28.63	-6	52.13	+ 1	40.08	-4	5.95	-
	19	27.58	+5	29.49	+ 6	28.81	6	52.41	+- 4	40.34	6	5.96	-
	2 0	27.33	+6	29.59	+ 4	28.99	-5	52.70	+ 7	40.60	6	5.98	
	21	27.07	+7	29.68	I	29.16	-2	52.99	+ 8	40.86	-5	6.00	+
	22	26.81	+6	29.76	3	29.33	+I	53.29	+ 7	41.11	-3	6.03	+
	23	26.55	+4	2 9.84	— 5	29.49	+3	53.59	+ 5	41.37	-1	6.06	+
	24	26.29	+1	29.91	- 6	29.65	+5	53.89	+ 2	41.63	+2	6.10	+
	25	26.03	-3	29.98	- 6	29.81	+6	54.20	3	41.89	+4	6.15	+
	26	25.77	-6	30.04	- 4	29.96	+5	54.51	- 6	42.15	+6	6.21	+
	27	25.51	-7	30.09	- I	30.11	+3	54.83	- 9	42.41	+7	6.27	
	2 8	25.25	-8	30.14	+ 2	30.25	0	55.15	10	42.67	+6	6.33	-
	2 9	24.98	-7	30.19	+ 6	30.39	-3	55.47	10	1 /3		6.40	-
	30	24.72	-4	30.23	+ 9	30.52	-5	55.80	7	43.19	+1	6.48	-1
	31	24.45	-I	30.26	+10	30.65	-7	56.13	- 4		-2	6.57	
	32	24.18	+2	30.28	+ 9	30.78	8	56.46	0	43.71	4	6.66	-
sec δ, t		+1:	1		1.93		2.24		2.20	+10		10	(0

		Oct	antis	20 G. 7"	1.	Octant	is 2 6	G. 6 ^m -	7 ^m ·	χ	Octar	ntis 6 ^m .	
191	13	AR.	€ Gl.	Dekl.	∝ Gl.	AR.	Gl.	Dekl.	Œ Gl.	AR.	Œ GI.	Dekl.	GI.
		14 ^h 44 ^m	in 6 0.01	-87° 47'	in 0.01	16 ^h 28 ^m	in 8 0.01	-86° 12'	in 0.01	18 ^b 3 ^m	in 0.01	-87° 39	in 0.01
Nov.	29	9.00	+15	60.18	+ 4	10.69	+ 3	41.69	+ 8	52.80	0	69.11	+-8
	30	9.36	+17	59.93	0	10.77	+ 6	41.38	+ 7	52.70	+ 6	68.80	+9
Dez.	1	9.74	+17	59.68	- 4	10.85	+ 9	41.07	+ 4 + 1	52.61	+-11	68.48	+7
	2	10.13	+13	59.44	- 7	11.04	+10	40.45	- 3	52.52	+15	68.16	+-5
	3	10.52	+ 7	59.20	- 9	11.14	+ 8	40.14	- 6	52.45	+16	67.84	+1
	4	10.92	0	58.96	- 9	11.25	+ 5	39.83	_ 8	52.39	+16	67.52	-3
	5	11.33	— 7	58.73	– 8	11.36	_ I	39.53	- 9	52.34	+11	67.20	6
	6	11.75	-12	0 0	— 5	11.48	- 5	39.23	- 7	52.29	+ 5	66.87	-8
	7	12.18	15		— I	11.61	8	38.93	- 4	52.26	2	66.55	- 9
	8	12.61	-15	58.06	+ 3	11.75	- 9	38.63	— I	52.24	- 9	66.22	-7
	9	13.06	-12	57.84	+ 7	11.89	9	38.33	+ 3	52.23	-14	65.90	-4
	IO	13.52	- 7	57.63	+ 9		8	38.03	+ 7	52.23		65.57	0
	ΙI	13.99	0	57-43	- - 10	12.20	- 4	37.74	-	52.24	16	65.24	+4
	12	14.46	+ 6	01 0	+ 9	12.36	— I	37.45	_	52.27	-12	64.91	+7
	13	14.95	+10	57.03	+ 7	12.52	+ 2	37.16	+ 8	52.30	- 7	64.58	+-8
	14	15.44	+12	56.84	+ 3	12.69	+ 5	36.87	+ 5	52.34	— I	64.25	+9
	15	15.94	- ⊢II	56.65	- I	12.87	+ 6	36.58		,	+ 4	63.92	+7
	16	16.44	+ 7	56.47	- 4	13.05	+ 5	36.30	— 3	52.46	+ 8	63.59	+4
	17	16.94	+ 2	56.29	- 6	13.24	+ 3	36.02	— 6	52.53	+10	63.26	0
	18	17.46	5	56.12	- 7	13.44	+ 1	35.74	- 8	52.61	+ 9	62.93	-4
	19	17.99	10	55.95	— 6	13.64	- 2	35.47	8	52.70	+ 6	62.60	7
	20	18.52	-13	55.79	- 4	13.85	- 5	35.20	- 7	52.81	- I	62.27	-9
	21	19.05	-14	55.63	— I	14.06	- 7	34.93	- 4		- 4	61.94	-8
	22	19.59	-11	55.48	+ 2	14.28	7	34.67	0	\$53.06 \$53.20	- 8	61.61	$-6 \\ -3$
	23	20.14	— 6	55.33	- ⊢ 5	14.51	- 5	34.41	+ 3	53.35	-10	60.95	+1
	24	20.69	0		+ 6	14.74	- 3	34.15	+ 6	53.51	- 7	60.62	-1-5
	25	21.25	+ 7	55.05	+ 6	14.98	+ I	33.89	+ 7	53.68	$-\frac{7}{3}$	60.29	8
	2 6	21.82	+13		+ 4	-	+ 5	33.64	+ 7	0.	+ 3	59.96	-+9
	27	22.39	+17	3.7	+ 2	- 0	-⊦- 8	33.39	+ 5	54.05	+ 9	59.63	+8
	28	22.96	+17	- 10	- 2	15.73	+10	33.14	+ 2	54.25	+14	59.31	+6
	29	23.54	+16	54.56	6	15.99	+10	32.90	_ 2	54.46	+16	58.99	+2
	30	24.13	+10	54.45	8		+ 9	32.66	-5	54.68	+16	58.67	I
	31	24.72	+ 3	54.35	- 9		+ 5	32.43	$-\tilde{8}$		+13	58.35	-5
	32	25.32	-		- 9	_				55.15		0	8
sec δ, t	g ô	+26	0.04	—26 .	02	+15	.13	15	.IO	+24	1.58	-24.	56

1913		σ ()ctantis 6 ^m .				β Octantis 4 ^m – 5 ^m .				7 Octantis 6 ^m .			
	AR.	Gl.	Dekl.	∝ Gl.	AR.	Gl.	Dekl.	∝ Gl.	AR.	Cl.	Dekl.	€ Gl.	
	19 ^h 21 ^m	in 8 0.01	-89° 14′	in " 0.01	22 ^h 37 ^m	111 8 0.01	-81°50′	j11 " 0.01	23 ^h 15 ^m	in 0.01	-87° 57′	in "O.OI	
Nov. 29	51.46	-13	12.41	+ 8	23.78	-4	22.24	+ 4	60.35	-15	39.88	+ 2	
30	1 '	+ 4	12.13	+10	23.64	3	22.21	+ 7	59.75	-14	39.88	+ 6	
Dez. 1	1	+21	11.85	+ 9		-	22.17	+10	59.15	-10	39.88	+ 9	
2	48.97	+37	11.57	+ 7	23.36	0	22.12	+10	58.55	- 3	39.87	10	
3	48.19	+47	11.28	+ 4	23.22	+2	22.07	+ 9	57.94	+ 4	39.86	+10	
4	47.44	+48	10.99	0	23.08	+3	22.OI	7	57.34	+11	39.84	+ 8	
5		+41	10.70	4	22.95	+4	21.95	3	56.73	15	39.82	+ 4	
6		+26	10.40	- 7	22.81	+4	21.88	1	56.12	+17	39.79	0	
7	45.38	+ 6	10.10	- 9	22.67	+3	21.80	- 5	55.52	+15	39.75	- 4	
8	44.75	-16	9.79	8	22.53	+2	21.71	8	54.91	+10	39.70	- 7	
9	44.14	-24	9.48	6	22.40	0	21.62	10	54.31	+ 3	39.65	- 9	
10	43.56	-37	9.17	— 3	22.26	-2	21.52	9	53.71	5	39.59	-10	
11	43.02	-51	8.85	+ 1	22.13	-3	21.42	- 7	53.11	- 12	39.53	- 8	
12	42.51	-46	8.54	+ 4	22.00	-4	21.31	- 4	52.51	-16	39.46	- 5	
13	42.02	-24	8.22	-1- 7	21.87	-4	21.19	C	51.91	-17	39.38	2	
12	41.56	16	1 /	+ 8	1 ' '	-4	21.07	+ 3	51.31	15	39.29	+ 2	
19		+ 3	7-57	+ 7	21.61	2	20.94	+ 5		-10	39.20	+ 4	
16	1 1 1 2	+19		+ 5		0	20.80	+ 6))	- 3	39.10	+ 6	
17	. ' '	-1-30		+ 1	22	2	20.66	+ 5		+ 5	39.00	+ 6	
18	40.04	33	6.59	2	21.22	+3	20.51	+ 3		+11	38.89	+ 4	
n i	39.74	+29	6.26	6		+4	20.36	C	1 31	+15	1 2 11	+ I	
20	1 37 11		273	_ 8	1	+-4	20.20	- 3	. 1	1		2	
2.	37 3		3 37	9		+3	2 0.04	- 6	1 1			4	
2:	32	7		8	1	+2	19.87	- 7				- 6	
2		1	4.91	- 5	20.60	0	19.70	- 7	46.06	+ 2	38.24	- 7	
2.	.] /		4.57	- 1	20.48		19.52	- 4	45.49	6	38.09	- 5	
2				+ 3	20.36	3	19.33	1-11 2	44.93	-12	37.94	— 3	
20	1 2		3.88	+ 1	20.24	4	19.14	+ 2	1			+ 1	
2	, , ,		0 20	+ 0	1		18.94		43.81	-	, , , , ,	+ 5	
2,	38.42	+15	3.19	I	20.01	2	18.74	9	43.26	-12	37.44	+ 8	
2	38.43	+32	2.84	+ 8	19.90	-r	18.53	+10	42.71	_ e	11 31	+10	
31	. ,	+44	2.49	+	19.79	+1	18.31	+10	42.17		31	+10	
3				+	1 19.68			+	' '	+ 8		+ 9	
3	2 38.64	+45	1.79	:	19.57	+4	17.87	+	41.10	+14	36.69	+ (
sec ô, tg		4.95	——————————————————————————————————————	4.05	.1.	7.05		5.97	1.2	8.10		8.09	

Const.	1) a And	romed.	2) β Cas	siopej.	3) ε Pho	enicis.	7) γ P	egasi.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	ob 3 ^m	28° 36′	oh 4 ^m	58° 40'	oh 4 ^m	46° 13'	oh 8m	14° 41′
Jan. o	52.61	44.3 9	30.23	27.6 6	60.09	55.3	44.80 10	62.9 8
10	52.48	43.4	29.92	27.0	59.90	54.9	44.70 11	62.1
20	52.35	42.3	29.63	25.8	59.73	54.0	44.59 9	01.2
False -	52.24 9	41.0	29.30	24.1	59.58	52.7	44.50 7	60.3 10
Febr. 9	52.15	39.5	29.13	22.I	59.46	51.0	44.43 6	59.3
19	52.08	38.0 16	28.95	19.7 26	59.37	48.9	44.37 2	58.3 9
März 1	52.05	36.4	28.83	17.1 26	59.32	46.5	44-35 c	57.4 7
11	52.05	34.9	28.78	14.5	59.31 -	43.8	44.35 3	50.7 6
21	52.09 10	33.5	28.80	11.8	59.34 10	40.9 34	44.38 9	56.1
31	52.19	32.3	28.92	9.I 22	59.44	37.5	44.47	55.8
April 10	52.32 19	31.5	29.11 26	6.9	59.58 20	34.3	44.60	55.8 2
20	52.51	31.0	29.37 34	5.0	59.78 24	31.2	44.77 20	56.0 6
30	52.73 27	30.9	29.71	3.5 10	60.02	28.0	44.97 25	56.6 9
Mai 10	53.00 30	31.2	30.11	2.5	60.31	24.9 28	45.22 27	57.5 12
20	53.30	31.8	30.55	2.0	60.64	22.I	45.49	58.7
30	53.62	32.9 14	31.04	2.0 6	61.01	19.4	45.79 ,,	60.2
Juni 9	53.97 35	34.3	31.50	2.6	01.40	17.0 20	40.11	01.9 20
19	54.32 26	36.0	32.07 52	3.7	01.81	15.0 16	40.45 22	03.9 21
Juli 9	54.68	38.0	32.59 50	5.2 20	02.23	13.4	40.78 32	00.0
Juli 9	55.02 33	40.2	33.09	7.2	62.65	12.2	47.10	68.1
19	55.35 20	42.6	33.56	9.6	63.04 38	11.5	47.41 20	70.4 ,,
1 29	55.05 27	45.2	34.00 44	122	63.42	$11.3 - \frac{2}{2}$	47.70 26	72.6
Aug. 8	55.92	47.7 26	34.30	15.3 22	63.76		47.96	74.8
18 28	56.16	50.3	34.71	18.0	64.05 25	12.3	48.19	76.8
	56.36	52.8	34.98	22.0	64.30	13.4	48.38	
Sept. 7	56.51	55.2	35.19	25.4	64.49	14.9	48.54	80.5
17	56.63	57.5 21	35.34	28.9	64.63	10.8	48.66	82.0
Okt. 7	50.70	59.0	35.43	32.3	04.70	18.8	48.73	83.4
	56.74	61.5	35.45	35.0	64.72	21.1	48.78	84.5
17	56.74	63.2	35.42	38.7	64.69	23.3	48.79	
N 27	56.71	64.6	35.33	41.5	64.61	25.6	48.77	86.0
Nov. 6	50.00	65.8 g	35.19	44.1	64.49	27.7	48.73	80.4
16	56.58	66.6	35.00 23	46.2	64.34	29.5	48.67	86.6
Dez. 6	56.48	67.2	34.77 26	47.9	64.17	31.0	48.59	86.6
	56.37	67.3 -	34.51	49.1	63.98	32.2	48.50	86.4
16	56.25	67.2	34.23 30	30.8	63.78	33.0	48.40	86.0
26	50.12	00.8	33.93	100	63.58	33.2	48.29	85.5
36	55.99	66.1	33.63	49.5	63.38	33.1	48.19	84.8
Mittl. Ort	53.24	36.4	31.63	11.7	59.87	39.2	45.23	59-5
sec à, tg à	1.139					1.044		+0.262

	-9) ı C	Ceti.	10) (Tu	canae.	11) β І	Tydri.	12) a Pho	enicis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	ΛR.	Dekl.
	oh 14m	9" 17'	oh 15 ^m	65° 22'	o ^h 21 ^m	77° 44′	0 ^h 21 ^m	42° 46′
Jan. o	59.57 10	87.2	33.50	89.3 8	13.94 89	59.3 11	59.41	57·5 ₁
10	59.47 10	0././	33.11	88.5	13.05 83	58.2 17	59.24 16	57.4 6
20	59.37 8	88.0 I	32.75 ₃₃	87.1	12.22	56.5 23	59.08	56.8 11
30 Febr. 9	59.29 7	88.1	32.42 28	85.2	11.47 64	54.2 27	58.93 13	55.7 14
reor. 9	59.22	88.1	32.14	82.7 28	10.83	51.5	58.80	54.3
19	59.17	87.9	31.93	79.9 32	10.30	48.4 34	58.70	52.4 21
März 1	59.14	87.5	31.78 8	70.7	9.91	45.0	58.63	50.3 25
11	59.13	86.9	31.70	73.3 36	9.66	41.3 38	58.60 -2	47.8 27
21	59.17 8	86.0	31.69 -9	69.7	9.56 - 7	37.5 43	58.62 6 58.68 6	45.1
31	59.25	84.7	2531.78	65.6 38	9.63	33.2	12	41.9
April 10	59.36 16	83.3 16	31.94 25	61.8	9.86	29.3 38	58.80 16	38.8
20	59.52	81.7	32.19	50.1	10.24	25.5 36	58.96	35.7
30	59.71	79.9 20	32.51	54.0	10.77 67	21.9	59.17 26	32.6
Mai 10	59.94 27	77.9 21	32.91	51.2	II.44 80	18.5	59.43	29.5 30
20	60.21	75.8	33.38 1	48.1 27	12.24	15.4 26	59.74	2 6.5 27
30	60.50	73.7 22	33.91	45.4 24	13.15	12.8	60.08	23.8
Juni 9	00.81	71.5	34.40 60	43.0	14.14	10.6	60.44	21.3
19	01.13	69.3	35.08 62	41.1	15.20 110	8.9	00.03	19.1
T. 1: 29	61.45	67.2	35.70 61	39.7 8	16.30	7.7 6	01.22	17.3
Juli 9	61.78	65.2	36.31 61	38.9	17.41	7.1	61.62	15.9
19	62.09	63.5	36.92	38.6	18.50	7.1 6	62.01	14.9 5
29	62.38	61.9	37·49 57	38.8	19.53	7.7	62.38 37	14.4
Aug. 8	62.65	00.0	38.01 46	39.6	20.48 84	8.8	02.71	14.4 5
18	02.88	59.6	38.47	41.0	21.32	10.4	63.01	14.9
28	63.08	58.9	38.86	42.7	22. 04 54	12.5	63.26	15.8
Sept. 7	63.24	58.4	39.16	44.9 25	22.58	15.0 27	63.46	17.1
17	63.36	58.3	39.37	47.4 27	22.94 19	17.7 29	63.61	18.7
27	63.44	58.4	39.48	50.1 ₂₈	23.13	20.6	63.71	20.6
Okt. 7	63.49	58.7 6	39.49 7	52.9 28	23.12	23.7	63.76	22.7
17	$63.51 - \frac{1}{2}$	59.3	39.42	55.7	22 .93 37	26.6	63.75	24.9
27	63.49	59.9 8	39.26	58.3	22.56	29.4 25	63.71	27.1 22
Nov. 6	63.45 6	60.7	39.02	60.7	22.03 67	210	63.62	29.3 19
16	63.39 8	61.6	38.72	62.8	21.36 78		63.50	31.2
26 I) an - 6	63.31 8	62.4 8	30.37 38	64.4	20.58 86	35.7	63.35	32.9
Dez. 6	63.23	63.2	37.99	65.6	19.72	36.8	63.18	34.2
16	63.13	64.0	37.58	66.2	18.81	37.2 -	63.01	35.2
26	63.03	64.7	37.17	66.2	17.88 93	37.1 8	62.82	35.7
36	62.92	65.2	36.76	65.6	16.97	36.3	62.64	35.8
Mittl. Ort	59.72	82.4	32.66	70.I	11.84	39.1	59.13	42.8
sec o, tg o	1.013	-0.162	2.400	-2.182	4.708	-4.600		-0.925

	13) 12 Ceti.		17) ζ Ca	ssiopej.	18) π Απ	dromed.	20) ô Ano	lromed.
1913	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl.
	oh 25 m	4° 25′	oh 32 ^m	53° 24′	oh 32m	33° 14′	oh 34 ^m	30° 23'
Jan. 0 10 20 30 Febr. 9 19 März 1 11 21 31 April 10 20 Mai 10 20 Juni 9 19 29 Juli 9 Aug. 8 18 28 Sept. 7 17 Okt. 7 17 Nov. 6 16	35.80 10 35.70 10 35.60 9 35.51 8 35.43 6 35.33 2 35.35 7 35.42 10 35.52 15 35.67 18 35.85 22 36.07 26 36.33 28 36.61 31 36.92 37.24 32.756 32.88 32 37.88 32 37.88 32 37.88 32 37.88 32 37.88 32 37.88 32 37.86 39.60 6 39.60 6 39.60 6 39.60 6 39.68 39.68 39.68 39.68 39.68 39.68 39.68 39.68	79.5 80.0 80.5 80.8 81.0 81.0 81.0 81.0 1 80.9 4 80.5 6 79.9 9 79.0 11 77.9 14 76.5 15 75.0 18 73.2 19 71.3 21 69.2 21 60.8 19 58.9 17 57.2 15 57.2 16 57.2 57.3 57	0 ^h 32 ^m 6.08 5.83 25 5.58 24 5.34 21 5.13 18 4.95 13 4.82 8 4.74 1 4.73 6 4.79 12 4.91 21 5.12 26 5.38 33 5.71 38 6.09 47 7.43 47 7.90 46 8.36 47 7.43 47 7.90 46 8.81 42 9.23 38 9.61 34 9.95 29 10.24 24 10.48 19 10.67 13 10.88 10.81 7 10.70 15	53° 24' 81,6 4 81.2 10 80.2 13 78.9 18 77.1 20 75.1 23 70.5 24 65.5 21 63.4 18 61.6 14 69.2 6 58.6 1 58.5 4 58.9 10 59.9 13 63.0 21 67.6 28 70.4 30 73.4 31 76.5 32 79.7 32 82.9 32 86.1 32 89.3 29 92.2 28 95.0 24 97.4 21 99.5 18	13.30 14 13.16 15 13.01 14 12.87 12 12.75 10 12.65 7 12.56 6 12.62 11 12.73 16 12.89 13.10 25 13.35 29 13.64 33 13.97 35 14.32 36 14.68 37 15.05 36 16.09 31 16.40 27 16.67 23 17.09 17.24 11 17.35 8 17.43 3 17.46 3 17.46 3 17.46 3 17.46 3 17.46 3	36.4 7 35.7 9 34.8 12 33.6 14 32.2 16 30.6 16 29.0 16 27.4 16 25.8 15 24.3 11 23.2 9 21.8 5 21.8 3 22.1 7 22.8 10 23.8 15 27.0 20 31.3 24 33.7 25 36.2 26 38.8 26 41.4 25 43.9 25 46.4 24 48.8 21 50.9 20 52.9 17 54.6 15	0 ^h 34 ^m 39.85 13 39.72 14 39.58 13 39.45 12 39.33 9 39.24 7 39.17 3 39.14 6 39.20 11 39.31 15 39.46 21 39.67 25 39.92 28 40.20 31 40.51 35 41.57 36 41.93 34 42.27 33 42.60 23 42.89 27 43.16 23 43.49 27 43.95 15 43.73 12 43.85 7 43.92 4 43.96 1 43.97 2 43.96 1 43.97 2 43.95 5 43.90 8 43.82 16	16.0 7 15.3 9 14.4 12 13.2 13 11.9 13 10.5 16 8.9 15 7.4 14 6.0 13 4.7 10 3.7 7 2.7 0 2.7 4 3.1 8 3.9 12 5.1 14 6.5 18 8.3 20 10.3 23 11.6 23 14.9 25 17.4 25 19.9 25 22.4 24 24.8 23 27.1 22 29.3 20 31.3 18 33.1 16 34.7 13 36.0 10
Dez. 6 16 26 36	39.53 39.45 39.36 39.26 39.16	55.6 56.3 7	10.36 21 10.15 23 9.92 25	102.6 8 103.4 103.7 3 103.5	17.19	58.6 58.8 -	43.61 12 43.49 14 43.35	38.4 2
Mittl. Ort	35.93	76.7 —0.078	7.00	65.6 +1.347	13.81	25.9 +0.655	40.31	6.3

	21) α Ca	ssiopej.	22) β	Ceti.	24) 21 Ca	assiopej.	25) o Ca	ssiopej.
1913	AR.	Dekl.	AR,	Dekl.	AR.	Dekl.	AR.	Dekl.
	oh 35"	56° 3'	oh 39"	18° 27′	o ^{li} 39 ⁿⁱ	74° 30'	oh 39m	47° 48
Jan. o	32.73	54.0	13.48	57.5	50.77	65.6	51.53	44.9
10	32.46	53.6 4	13.36	58.0	50.07 70	$65.7 - \frac{1}{6}$	51.33	11 5
20	32.18 26	528	13.25	58.1	49.37 67	65.1	51.12	43.7
30 Febr. 9	31.92	51.5	13.14	58.0	48.70 61	64.0	50.92	42.4
r cor. 9	31.68	49.8	13.05 8	57.7	48.09	62.3	50.73	40.8
19	31.48	47.7 23	12.97	57.0	47.57	60.2	50.58	38.9
März 1	31.33	45.4 24	12.92	56.1	47.15	57·7 ₂₈	50.46	36.9
21	31.24	43.0	12.89	55.0	46.86	54.9 29	50.39	
31	31.21 - 5	40.5 37.8	12.90 12.94	53.6	46.72	52.0 29 49.1	50.37	32.5 ₂₁
	13	22	31 9	21	31 20	30	31 12	20
April 10	31.39	35.6	13.03	49.8	46.93	46.I 26	50.54	28.4
30	31.59 ₂₈ 31.87	33.7 16	13.16	47.7	47.27 47	43.5	50.71	26.8
Mai 10	22.21 34	32.I 31.0	13.34	45.5 24 43.1	47.74 61 48.35	39.3	50.95 51.24	25.5 24.7
20	32.61	30.3	13.80	40.7	49.07	37.9	51.58 34	24.3
30	33.05	30.0	28	38.2	49.87 86	ð	J 57.06 3₹	24.4
Juni 9	33.52 47	202 3	14.08	35.8 24	49.87 86 50.73 m	$\frac{37.1}{36.8} = \frac{3}{4}$	51.96 52.36	2.10
19	24.01	31.1	14.71	33.5	57 62	27.0	52.79	25.0
29	34.51	32.4	15.05 34	21.4	52.55	37.8	53.22 43	27.2
Juli 9	35.00	34.1	15.38 33	29.4	53.45	39.1	53.65	29.0
19	35.47	36.2	15.70	27.8	54.22	40.8	54.06	21.2
29	35.92	28.6 24	16.01 31	26.4	CC TC	12.T	EA 15 35	226
Aug. 8	36.32	41.4	16.30 26	25.4	55.91 67	45.7	54.81	36.3
18	36.69 36	44.4	16.56	24.7	56.58 58	48.7	55.14 28	20 I
28	37.00	47.5	16.78	24.4	57.10	52.0 33	55.42	42.0
Sept. 7	37.25	50.8	16.97	24.4	57.63	55.5	55.65	45 Y
17	37.46	54.1 33	17.12	24.7	57.99 36 57.99 25	59.2	55.83	18 T
27	37.60 8	$57.4 \frac{33}{32}$	17.23	25.4 7	58.24	62.9 37	55.96	5 I. I
Okt. 7	37.68	00.0	17.30	26.3	58.37	00.0	50.05	53.9 2
17	37.71	63.6	17.33	27.4	58.38	70.3	56.10	56.6
27	37.69	66.5 26	17.34	28.6	58.27	73.8 35	56.10	50.T
Nov. 6	37.62	69.1	17.31 5	29.9 13	58.05 33	77.0 30	56.05	61.3
16	37.50	71.3	17.26	31.I ₁₃	57.72	80.0	55.97	63.2
26	37.33	73.2	17.19	32.4	57.28	82.0	55.86	64.8
Dez. 6	37.13	74.6	17.10	33.5	50.75	84.7	55.71	66.0
16	36.90	75.5	16.99	34.5 7	56.15 65	86.2	55.54 19	66.7
26	30.05	70.0	16.88	35.2	55.50 60	87.2	55.35 20	66.9
36	36.38	75.9	16.77	35.8	54.81	87.6	55.15	66.7
Mittl. Ort	33.69	37-3	13.38	50.5	52.85	45.5	52.24	30.0
sec δ, tg δ	1.791	-1.486	1.054	-0.334	3.744	+3.608	1.489	+1.102

	2 7) ζ Λn	dromed.	32) y Ca	ssiopej.	33) µ An	dromed.	35) α Sci	alptoris.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	oh 42 ^m	23° 47′	oh 51m	60° 14′	oh 51 m	38° 1′	oh 54 ^m	29° 49′
Jan. o	43.11	46.3 6	25.91	63.1	54.72 16	52.3	25.18	49.3
10	42.99	45.7 8	25.59	63.0 6	54.56	51.8 8	25.04	49.7
20	42.87	44.9 10	25.26 33	62.4	54.39 16	51.0	24.90	49.7
30	42.74	43.9	24.94	61.3 16	54.23 15	49.9	24.77	49.3
Febr. 9	42.63	42.7	24.65	59.7	54.08	48.6	24.64	48.6
19	42.54 6	41.5	24.30	57.8	52.06	47.0	24.53 8	47.5
März 1	42.48	40.3	24.10	55.5	53.86	45.3 18	24.45	46.1
11	42.44	39.2	24.05 6	53.I ₂₆	53.80 2	43.5	24.40 2	44.4 20
21	42.45	38.1 8	23.99	50.5 26	$53.78 - \frac{2}{3}$	41.8 16	$24.38 - \frac{2}{3}$	42.4
31	42.49	37-3	24.00	47.9 26	53.81	40.2	24.40 8	40.0
April 10	42.59	36.6	24.11	15.2	53.91	28.6	24.48	37.4
20	42.73	36.3	24.21	13.2	54.05	27 5	2450	217
30	42.02	36.2	24.50	41.3	54.25	36.7	24.75	32.0
Mai 10	43.14	26.5	24.01 35	39.9 10	54.50	36.2	24.05	29.I ₂₈
20	43.41	37.2	25.35	38.9	54.79	36.2	25.20	26.3
30	43.71	38.2	25.82	38.4	33	36.5	25.48	23.5 ₂₆
Juni 9	44.03	20 5 13	26.33	282	55.12 36 55.48 37	272	25.79	20.0
19	44.37	41.1	26.86	38.8 ³	55.85 3/	38.4	26.12 33	18.4
29	44.72	12.0	27.41 55	30.8	r6 24 39	20.0	26.47 35	16.2
Juli 9	45.06 34	45.0	27.95	41.2	56.62	41.7	26.82	14.3
19	33	21	28.48	19	57.00 38	43.8	27.17	12.8
29	45.39 32 45.71 30	47.1	28.99	43.1	57.35	45.0 ₂₃ 46.1	27.50 33	11.7
Aug. 8	46.00	49.4 51.7	29.46 ⁴⁷	45.4 26	57.68	486 25	27.81	II.O
18	46.26	53.9 22	29.88 42	50.8	57.08	512	28.10	TO.7 -3
28	46.49 23	56.2 23	30.25	53.9	58.25 27	53.8	28.35 25	10.8
Sept. 7	20	21	31	33	22	27	2.1	6
_	46.69 15	58.3 19	30.56 30.81	57.2	58.47 18 58.65	56.5 26	28.56 28.73	11.4 9
17 27	46.96	60.2 19	31.00	63.9	58.79	59.1 61.6	28.86	12.3
Okt. 7	47.04	63.7	21.12	67.2 33	58.89	64.0	28.95	13.5
17	47.09	65.1	31.18	70.4 32	58.96	66.2	28.99	16.7
	2	12	0	31	2	20	1	19
Nov. 6	47.11	66.3	31.18 6	73.5 28	58.98	68.2	29.00 -3	18.6
Nov. 6	47.10	67.3 7	31.12	76.3 26	58.97	70.0	28.97 6	20.4 18
26	47.06 6	68.0	31.01	78.9 21	58.93 7	71.5	28.91 8	22.2 16
Dez. 6	47.00 8	68.5 ² 68.7	30.84 22 30.62	81.0 82.7	58.86 10 58.76	72.7 8	28.83 10 28.73	23.8
	46.92	0	25	13	12	73.5	1.5	25.3
16	46.82	68.7	30.37 29	84.0 7	58.64	74.0	28.60	26.5 8
2 6	46.71	68.4	30.08	84.7	58.49	74.1	28.47	^{27.3} 6
36	46.59	67.9	29.77	84.9	58.34	73.8	28.33	27.9
Mittl. Ort	43.43	38.5	26.82	45.0	55.15	39.6	24.85	39.3
sec ò, tg ò	1.093	+0.441	2.015	1 1.749	1.269	-10.782	1.153	-0.573

-										
1913	36) ε Pi	_	38) β Pho		42) β An		45) v Pis	-		
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.		
	oh 58 m	7° 25'	I ^h 2 ^m	47° 10'	I ^h 4 ^m	35° 9′	1 ^h 14 ^m	26° 48′		
Jan. o	25.52	21.8	12.84	78.8	51.07	46.7	40.70	35.2		
10	25.41	21.2	12.62	$79.0 - \frac{2}{4}$	50.92 16	40.3	40.58	34.8		
20	25.30 11	20.5 6	12.41	78.6	50.76	45.6	40.44	34.1 8		
Febr. 9	25.19 10	19.9 6	12.20	77.8	50.61	44.7	40.30	33.3 10		
rebr. 9	25.09	19.3	12.01	76.5	50.46	43.4	40.17	32.3		
19	25.01	18.8	11.84	74.7	50.33 10	42.0	40.05 9	31.1 12		
März 1	24.94	18.3	11.71	72.6	50.23	40.5	39.90	29.9 12		
11	24.90	18.0	11.61 6	70.1 28	50.10	38.9 16	39.89	28.7 11		
21	24.89	17.9	11.55	67.3 31	50.13	37.3	39.86	27.6		
31	24.92	18.0	11.54 - 5	64.2	50.15	35.8	39.87	26.6		
April 10	25.00	18.5 6	11.59 11	60.7	50.23	34.4	39.92 12	25.8		
20	25.11 16	19.1 8	11.70 16	57.3	50.36 18	33.4 7	40.04 16	25.1		
30	25.27	19.9	11.86	54.0	50.54 22	32.7	40.20	24.8		
Mai 10	25.47	21.1	12.08 26	50.0	50.76 28	32.3	40.41	24.8		
20	25.7I 27	22.5	12.34	47.4	51.04	32.3	40.65	25.2		
30	25.98	24.0 18	12.66	44.3 28	51.35 34	32.7 7	40.94 31	25.9 10		
Juni 9	26.28	25.8	13.01 38	41.5 25	51.09 26	33.4	41.25 34	26.9 13		
19	26.59 32	27.7 20	13.39	30.0	52.05 38	34.5	41.59 35	28.2		
T 1: 29	26.91	29.7 21	13.79 42	36.8	52.43 38	36.0	41.94 35	29.7 18		
Juli 9	27.24	31.8	14.21	35.1	52.81 36	37.7	42.29	31.5		
19	27.56	33.8	14.62	33.8	53.17 36	39.7	42.64	33.5 21		
29	27.80	35.8 19	15.01 39	33.I 2	53.53 22	41.9 24	42.98 34	35.6 22		
Aug. 8	28.15 26	37.7	15.39 35	329 -	53.80	44.3	43.29 30	37.8 22		
18	28.4I 23	39.4	15 74 30	33.2 8	54.16 27	46.7	43.59 26	10:0		
28	28.64	40.9	16.04	34.0	54.43	49. I	43.85	42.2		
Sept. 7	28.84 16	42.2	16.30	35.3 16	54.66	51.6	44.08	44.3		
17	29.00	43.3	16.51	36.9 21	54.86	54.I 25	44.27 16	46.4		
27	29.13	44.2	10.00	39.0	55.01 12	56.4	44.43 12	48.2		
Okt. 7	29.23 6	44.8	10.76	41.2	55.13 8	58.7	44.55	50.0 16		
17	29.29	45.2	16.80 =	43.7	55.21	60.7	44.64	51.0		
27	29.32	45.5	16.79	46.2	55.25	62.5	44.69	53.0		
Nov. 6	29.33	45.5	16.74	48.7 25	55.26	64.2 17	44.71	SAT		
16	29.31	45.4 3	16.63	51.0 21	55.23	65.6	44.70	55.1 7		
26	29.20 6	45.1	16.50 17	53.1 18	55.18 8	66.6	44.67	55.8		
Dez. 6	29.20	44.7	10.33	54.9	55.10	67.4	44.61	56.2		
16	20.T2	44.3 6	16.14	56.2	54.00	67.9	11.52	56.4		
26	29.03 10	43.7 6	15.93 22	57.1	54.87	68.0	11.12	56.4		
36	28.93	43.1	15.71	57.5	54.73	67.8	44.31	56.1 3		
Mittl, Ort	25.57	19.1	12.12	64.6	51.37	34-5	40.84	25.3		
sec 8, tg 8	1.008	+0.130	1.471	1.079		+0.704	1.120	+ 0.505		

	47) 9	Ceti.	48) o Ca	issiopej.	50) ŋ Pi	iscium.	51) 40 Ca	ssiopej.
1913	ΛR.	Dekl.	AR.	Dekl.	AR.	Dekl. -ŀ	AR.	Dekl.
	1, 10 m	8° 37′	1 h 20 m	59° 46′	1 h 26 m	14° 53′	1 ^h 31 ^m	72° 35′
Jan. 0 10 20 30 Febr. 9 19 März 1 11 21	40.69 11 40.58 11 40.47 12 40.35 11 40.24 10 40.14 9 40.05 6 39.99 3 39.96 0	57.5 6 58.1 5 58.6 3 58.9 2 59.1 1 59.0 4 58.6 5 58.1 8 57.3 10	6.25 30 5.95 32 5.63 33 5.30 30 5.00 28 4.72 24 4.48 18 4.30 11 4.19 3	79.4 79.6 2 79.4 8 78.6 13 77.3 16 75.7 20 73.7 23 71.4 24 69.0 25	49.56 49.45 11 49.34 49.22 49.10 11 48.99 48.89 7 48.82 7 48.79 48.79	57.6 6 57.0 6 56.4 6 55.8 8 55.0 7 54.3 7 53.6 6 53.0 5 52.5 4	31.55 58 30.97 61 30.36 61 29.75 60 29.15 54 28.61 48 28.13 38 27.75 26 27.49 13	70.7 71.4 71.5 71.0 70.0 68.5 66.4 64.1 26 61.5 28 58.7
April 10 20 Mai 10 20 Juni 9	39.96 40.00 10.10 40.24 40.41 40.63 24 40.87 28 41.15	56.3 55.0 17 53.3 17 51.6 19 49.7 21 47.6 22 45.4 22 43.2	4.21 15 4.36 23 4.59 30 4.89 38 5.27 44 5.71 48	64.0 25 61.6 19 59.7 17 58.0 12 56.8 8 56.0 3 55.7 3	48.83 10 48.93 13 49.06 19 49.25 22 49.47 26 49.73 29	52.1 52.0 1 52.1 52.5 6 53.1 9 54.0 12 55.2 14 56.6 16	27.36 o 27.36 i7 27.53 30 28.26 54 28.80 65 29.45 73 30.18 78	55.9 29 53.0 25 50.5 22 48.3 18 46.5 13 45.2 10
Juli 9	41.45 32 41.77 32 42.09 32	40.9 23 38.7 20 36.7 20	6.71 54 7.25 55 7.80 54	55.8 6 56.4 11 57.5 16	50.33 32 50.65 34 50.99 33	58.2 60.0 61.9	30.96 83 31.79 85 32.64 85	43.8 4 43.9 7 44.6 11
19 29 Aug. 8 18 28	42.41 42.73 29 43.02 28 43.30 24 43.54 21	34.7 33.0 14 31.6 12 30.4 8 29.6	8.34 8.87 9.37 9.83 41 10.24	59.1 61.0 23 63.3 26 65.9 28 68.7	51.32 51.64 30 51.94 28 52.22 26 52.48	63.8 20 65.8 20 67.8 18 69.6 18 71.4 16	33·49 8 ₃ 34·32 79 35·11 74 35·85 67 36·52 59	45.7 16 47.3 20 49.3 24 51.7 28 54.5 31
Sept. 7 17 27 Okt. 7	43.75 18 43.93 15 44.08 12 44.20 8	29.0 28.8 - 28.9 29.2 6 29.8 8	10.60 31 10.91 24 11.15 19 11.34 13 11.47	71.7 32 74.9 33 78.2 32 81.4 32 84.6	52.70 52.90 16 53.06 13 53.19 53.28	73.0 14 74.4 13 75.7 10 76.7 9 77.6 6	37.11 51 37.62 41 38.03 31 38.34 21 38.55 11	57.6 60.9 34 64.3 36 67.9 35 71.4
Nov. 6	44.30 6	30.6 31.5 32.5 10 33.5 10	11.54 0 11.54 6 11.48 11 11.37 17	87.6 29 90.5 27 93.2 23 95.5 19	53·35 53·38 53·39 53·37 4	78.2 78.6 78.9 79.0	38.66 -1 38.65 11 38.54 22 38.32 -1	75.0 78.3 33 81.5 84.4 25
Dez. 6 16 26 36	44.24 44.17 44.08 43.97	34.5 10 35.5 8 36.3 8 37.1	11.20 10.99 10.73 10.44	97.4	53.33 53.26 53.18 53.08	79.0 78.8 78.5 78.0	38.01 31 37.60 37.11 55 36.56	86.9 21 89.0 15 90.5 11 91.6
Mittl. Ort	40.46 1.011	55·3 -0.152	6.79 1.987	60.6 + 1.717	49.51	51.3 +0.266	32.30 3.343	49.6 -1-3.190

_	52) v Pe	ersei.	54) a Ei	idani.	55) 43 Ca	ssiopej.	57) φ F	ersei.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. -t·	AR.	Dekl. -I-
	1 32 ni	48° 11′	1 ^h 34 ^m	57° 40′	1 ^h 35 ^m	67° 36′	1 ^h 38 ^m	50° 15′
Jan. o		32.5 I	29.95 31	57.4	52.27	33.0 6	11.77	20.2
10	38.26	32.6	29.64	57.8	51.85 46	33.6	11.56	20.4 -2
20	38.04 22	32.4	29.31	57.6	51.39 47	33.7	11.34	20.2
30		31.7	28.99	56.8	50.92	33.2	11.10	19.5
Febr. 9	37.60	30.5	28.69	55.5	50.47	32.2	10.87	18.5
19	17	29.1	28.41	53.7 22	50.06 36	30.6	10.65	17.1
März 1	14	27.4 19	28.16	51.5	49.70 29	28.7	10.46	15.4 20
11	37.10	25.5 20	27.95	48.8	49.41	26.5	10.31	13.4 20
21		23.5 20	27.80	45.0 22	49.21	24.0	10.22	11.4
31	36.99 -	21.5	27.70	42.5	49.10 -	21.3	10.18 _	9.3
April 10	37.02	19.5	27.67	39.1	49.11	18.7 28	10.20	7.3 20
20	37.13	17.6	27.72	25.I	49.24	15.9 24	10.31	5.3 16
30	37.30 24	16.1	27.83	31.4	49.48 35	13.5	10.48	3.7
Mai 10	37.54 20	14.9 8	28.02	27.0	49.83	T1.5	10.71 30	2.4
20	37.83	14.1	28.27	24.3	50.27	9.8	11.01	1.4
30	38.17	13.7	28.59	200	50.80	8.6	11.35	0.0
Juni 9	28.55	13.6	28.05	17.0	51.20 39	7.8	11.74	0.7
19	38.96	14.1 5	29.37	I5.I	52.03 68	7.6	12.16	1.0
29	20.30	14.9	20.82	12.7	52.71 60	7.8	12.61 45	I.7
Juli 9	39.83	I6.I	30.30	10.9	53.40	8.5	13.06	2.8
19	40.27	17.7	30.78	0.5	54.00	0.7	13.51	4.0
29	40.70 43	19.6	31.27	8.7	E176	TT 2	12.06 43	DI
Aug. 8	1110	21.7	31.74	$8.5 - \frac{2}{3}$	EE 41	122	14.38	8 2. 21
18	41.48 38	24.T	32.17	8.8 3	50.0I	15.7	14.78	TO 5
28	41.82 34	26.7	32.57	9.7	56.56 55	18.4	15.14	13.1
	31	27	3	5 14	50	30	33	27
Sept. 7	42.13 26	29.4 27	32.92	9 11.1	57.06	21.4	15.46	15.8
17	42.39 22	32.1 28	33.21	13.0 23	57.48	34.0 33	15./4	18.6
Okt. 7	42.61	34.9 28	33.44				15.98	
	42.79 13	37·7 ₂₆	33.60	8 20.6 27	58.11	31.3	16.17	24.2
17	9	40.3	33.68	2 20.0		34.7		27.0
27	4	42.9 23	33.70	23.5 20	58.40	38.1 32	16.41	29.6
Nov. 6	1 CC.	45.2		26.4 28	50.43	41.3	1 10.45	32.0
16	10 1	47.4 18	33.53	6 29.2	58.37	4 44.3 28	16.46	34.3
26	43.00	49.2 16	33.37	31.0	58.23	47.I 23	10.42	30.3
Dez. 6	42.91	50.8	33.15	33.8	58.02	49.4	16.33	38.0
16		51.9 8	32.89	35.5	5772	51.3	16.20	20.0
26		52.7	1 6-	7 46 1	57 28 3	528	16.04	40.1
	10		10 -	07.4	-6-0 4	9	15.84	0 .06
36	42.45	53.0	32.28	37.4	56.98	53.7	15.04	40.6
36 Mittl. Ort		16.0	28.57	42.7	50.98	12.5	11.96	3.1

	59) τ (Ceti*).	60) o Pi	scium.	61) Lac. 8	Sculpt.	62) 50	Ce t i.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 ^h 40 ^m	16° 23′	rh 40m	8° 43′	I ^h 4I ^m	25° 28′	1 ^h 47 ^m	10° 45′
Jan. o	1.99	47.5	48.03 10	17.4 6	34.81	81.0	10.33	54.I 8
10	1.87	48.2	47.93	16.8	34.67	81.8	10.22	54.9
20	1.75	48.7	47.81	16.2	34.53	82.2	10.10	55.4
30	1.61	40.9	47.69 12	15.6	34.38	82.3	9.98	55.8 r
Febr. 9	1.47	48.7	47.57	15.1	34.24	82.0	9.85	55.9 -
19	1.35 10	48.3 6	47.46	14.6	34.10	81.3 10	9.73	55.8
März 1	1.25 8	47.7	47.36	14.2	33.98	80.3	9.62	55.5 6
II	1.17 6	46.8	47.29	13.8	33.89	79.0 16	9.54 6	54.9 9
21	1.11	45.5 15	47.24 2	13.7	33.82	77.4 19	9.48	54.0
31	$1.08 - \frac{3}{2}$	44.0	47.22 —	13.7	33.79	75.5	9.46 -	52.9
April 10	T.10	42.3	47.25 8	12.0	33.80 6	722	9.48	51.5
20	17 1.17 7	40.2	17,22	T1.1 5	23.86	707	19 0.54	10.7
30	1.28 16	38.0	17.45	15.T	33.07	68.T	0.64	47.0
Mai 10	1.44	35.6	17.62	16.1	24.12	65.4 28	0.70	45.0
20	1.64	33.2	47.82	17.3	34.32	62.6	9.98	43.8
30	1.87	30.6	18 06 24	τ 8 17	34.56	59.8 27	10.21	41.5
Juni 9	2.14	28.1	48.34	20.3	34.83	T	10.47	39.2
19	2.42	25 7 24	48.64	22.0	25.12	E1 E	10.76	36.9
29	2.74	23.4	48.95	22.0	35.45	52 T	11.07 31	24.6 23
Juli 9	3.06 32	21.3	49.28 33	25.8	35.78	49.9	11.39 32	32.5
	32	20	32	20	1 34	18	32	19
19	3.38 32	19.3	49.60	27.8	36.12	48.1	11.71	30.6
Aug. 8	3.70 30	17.6	49.92 31	29.7 18	36.45		12.03 30	14
7 ig. 8	4.00 20	- 9	50.23 28		36.77		12.33	27.4
28	4.29 26	15.4 6	50.51 26		37.07 28		12.62	26.2
	4.55	2	50.77	34.7	37.35	44.5 -	14.00	25.4
Sept. 7	4.77 20		51.00		37.59 21		13.12	24.9
17	4.97 16		51.20			45.2		24.8
()1+	5.13	15.2 8	51.38	37.9	37.97	46.2	13.50	24.9
Okt. 7	5.25	16.0	51.52		38.11		13.63	25.4
17	5.35	17.0	51.62	39.1	1 38.21	49.0	13.74	26.I
27	5.41	18.2	51.70	20.2	38.27	50.7	12.82	27.0
Nov. 6	5.43	TO.0	51.75	39.4	38.30	52.5	12.86	28.1
16		21.1	51.77	39.3	38.20	54.4	Ta 877 -	29.3
26	5.40	22.5	51.76	39 1	38.25	56.2	13.86	30.6
Dez. 6	5.34	23.8	51.73	38.7	38.19	57.8	13.82	31.7
16	5.25	25.0	51.67	38.3	28.10	50.2	1276	32.8
26	5.16	26.0	FT 60	27.8	27.00	60.5	T2 68	220
36	1 - 1	26.8	51.50	37.3	37.86	61.4	13.57	34.7
Mittl. Ort	1.57	43.5	47.84	12.8	34.24	74.4	9.92	52.3
	1		1					
seco, tgo	1.042	0.29	1.012	+0.153	1.108	-0.477	1.018	-0.19

^{*)} Die jährliche Parallaxe ist bereits angebracht.

	63) ε Ca	ssiopej.	64) a Tr	ianguli.	65) ξ P	iscium.	66) ß A	Arietis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 ^h 48 ⁱⁿ	63° 14′	1 ^h 48 ^m	29" 9'	1 h 49 m	2° 45′	1 ^h 49 ^m	20° 22
Jan. o	7.09	51.7 6	7.15	30.9	3.29 10	32.9 7	49.98	68.ï
10	0.75	52.3 ₁	7.02	30.7	3.19	32.2	49.87	67.7
20	6.39 38	52.4	6.89	30.3	3.07	31.7	49.75	07.2
30	0.0I	52.0 g	6.74	29.6	2.95 12	31.2	49.62	66.6
Febr. 9	5.64 34	51.1	6.59	28.8	2.83	30.7	49.48	65.9
19	5.30 gr	49.8	6.45	27.8	2.71	30.4 2	49.36	65.1
März 1	4.99 26	48.0 21	6.32	26.6	2.61 8	30.2	49.24 9	64.2
11	4.73 18	45.9 24	6.22	25.5 12	2.53 6	30.2	49.15 6	63.4
21	4.55 ₁₀	43.5	6.16	24.3	2.47	30.3	49.09 2	02.7 6
31	4.45	41.1	$6.13 - \frac{3}{2}$	23.2	2.45 -	30.7	49.07 -	62.1
April 10	4.44	38.6	6.15	22.2 8	2.47	31.3 9	49.09	61.6
20	4.54 20	35.9 22	10 6.23	21.4 6	19 2.54 TI	32.2	49.10	61.3
30	4.74 28	33.7	6.36	20.8	2.65	33.2	49.28	61.3
Mai 10	5.02 37	31.8	0.53	20.6 -	2.80	34.5	49.45	61.5 6
20	5.39	30.2	6.76	20.7	2.99	36.0	49.66	62.1
30	5.83	29.0 8	7.03	2.1.0	3.23 26	37.6	49.91 28	62.0
Juni 9	6.33	28.2	7.33	21.7 7 10	2.40	39.4 20	50.10	63.0
19	6.88	28.0 -	7.65	22.7	3.78 29	4I.4 20	50.50	65.2 13
29	7.47 60	28.1	8.00 35	24.0 15	4.09 32	43.4	-50.83 ³³	66.7 17
Juli 9	8.07 60	28.8	8.30	25.5	4.41	45.3	51.16 33	68.4
19	8.67	29.9	8.72	27.2	4.73	47.2	51.50	70.2
29	0.26 59	21.4	9.07 35	20.0	5.05	40.I	51.84 34	72.1
Aug. 8	9.84	22 2 19	9.41	31.0	5.25	50.8	52.16 32	74.0
18	10.38	35.6 26	9.73 29	33.0 20	5.64 26	52.3	52.46 3c 28	75.9 18
28	10.87	38.2	10.02	35.0	5.90	53.6	52.74	77.7
Sept. 7	11.32	41.0	10.28	37.1	6.13	547	52.99	79.4
17	11.71	44.0	TO.5 T	20. I	621	55.5	53.21	81.0
27	12.05 34	47.2	10.71	410	6.51	56.0	53.40	82.5
Okt. 7	12.22	50.4	10.87	12.8	6.66	56.3	53.55	82.8
17	12.52	53.6 32	11.00	44.4	6.77	56.4	53.68	84.9
27	12 65	56.8 32	11.10	15	680	56.3	50.00	85.0
Nov. 6	12.05 6	59.9 31	11.16	45.9 47.2	6.01	56.0 3	53.77 6 53.83	86.7
16	T2 7T	62.8 26	11.19	48.3	6.03	55.5	53.86	87.2 5
26	T2 62	65.4 23	11.19	49.2	6.02	550	53.86	87.6
Dez. 6	12.49	0'7.'/	11.15	49.9	6.01	54.4	53.83	87.9
16	21	10	11.09	4	6.85	7	5	0
2 6	12.28	70.0	TT.00 9	50.3 2	6.78	53.7 7	53.78	87.9 87.8
36	11.71	70.9 10 71.9	10.89	50.5 T	6.69	53.0 6 52.4	53.71 53.61	87.6
30	11./1	71.9	10.09	J-114	0.09	J-4-4	22.01	
Mittl. Ort	7.31	31.8	7.07	19.4	3.00	30.1	49.83	59-4
sec 8, tg 8	2.221	+1.983	1.145	+ 0.558	1.001	+0.048	T.067	+0.372

	01)	1317/13	11 () 1741	INIXI	ION D	13161317		
7074	67) 4 Ph	oenicis.	68) χ E	ridani.	71) v	Ceti.	70) 50 Ca	assiopej.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. +
	1 ^h 50 ^m	46° 43′	1 ^h 52 ^m	52° 1′	1 ^h 55 ^m	21° 29′	1 ^h 55 ^m	71° 59'
Jan. o	10.61	54.8 55.5 7	35.60 ₂₆ 35.31 ₂₇	103.4 104.1	54.94 54.81	61.3 8 62.1	58.57 58.04 53	84.7 10 85.7
20	10.10	55.7	35.07	104.2	54.68	62.6 5	57.47 50	86.T 4
3° Febr. 9	9.92	55.4 8	34.80	103.8 4	54.54 15	02.9 T	56.88 59	85.9 7
	9.69	54.6	34.53	102.9	54.39	62.8	56.29 56	85.2
März 1	9.48	53·3 51.6	34.28 34.05	99.5	54.26 54.13	62.3	55.73 50 55.23	83.9 82.2
11	9.10 16 9.12 13	49.4 25	33.86	07.2	54.03 8	60.5	54.82	80.0 22
21	8.99 8	46.9 28	33.71	94.5 30	53.95	59.2	54.50 32	77.6 24
31	8.91	44.1	33.61	91.5	53.91	57.5	54.30	74.9
April 10	8.88 -	41.0 36	33.56	88.2	53.91	55.6	54.24	72.2
20 -30	9.00	37·4 34.0	33.58 33.66		53.95	53.4 26	54.32 54.56	69.6
Mai 10	0.14	30.6 34	33.80	77.3	54.10	48.2	54.0T 33	645 23
20	9.34 26	27.2	34.01	73.8 33	54.37	45.7	55.39	62.5
30	9.60 30	23.9 31	34.28	70.4	54.59 26	120	55.97 6-	600
Juni 9	9.90 34	20.8 29	34.60	67.2	54.85	40.3	56.64	59.7
19	10.24	17.9 25	34.90	04.3 26	55.14	37.8	57.39	59.0
Juli 9	10.61 39	15.4	35.36 42 35.78	59.6	55.45 ₃₂ 55.77	35·3 ₂₂	58.18	58.8 -
19	11.40	11.5	36.21	58.0	56.10	31.2	50 85	600
29	11.80	10.3	36.65	56.8	56.42 32	20.5	60.68	61 2 13
Aug. 8	12.19 39	9.6 7	37.07	56.2	56.74 32	28.3	61.48	620
18	12.50 34	9.5	37.48	50.2 6	57.04 28	27.4	62.24	65.1
2.8	12.90	9.9	37.85	50.0	57.32	20.9	62.95	07.0
Sept. 7	13.20 26		38.18	58.0	57.57	26.8 -	63.59	70.4 31
17 27	21	12.3	38.47	(AT 4		27.2 27.9	64.16	72 5
Okt. 7	12.82	16.3	28 88	628 24	1 EX T2.	20.0	65.03	80.T 34
17	13.94	18.8 25	38.99	66.4	58.24	30.3	65.32	83.6
27	13.99	21.4	39.05	69.2	58.32	31.8	65.51	87.1
Nov. 6	14.00	24.I 26		72.0	ER 26	33.5	65 60 -	90.5 34
16	13.96	26.7	38.99	74.8	58.37	35.2	65.57	3 93.7 3 ² 3 93.7 3 ⁰
Dez. 6	J / 12	29.2 31.3	38.88	77.3	58.35 58.30	36.9 38.6	65.44 2	
16	16	19	08.54	9 87 7	5822	100	64.88	3 TOT 6
26	12 20 19	216	28.2T	83.0	58.14	41.3	64.46	102.4
36	2 27 77	35.6	38.06	83.9	58.02	42.3	63.97	104.6
Mittl. Or	9.53	43.1	34.31	90.7	54-35	56.5	58.78	63.4
see 8, tg 8		-1.062	1	-1.281		-0 .3 94		+-3.077

	72) a	Hydri.	73) y An	dromed.	74) a l	Arietis.	75) β Tri	anguli.
1913		Dekl.		Dekl.		Dekl.		Dekl.
	AR.		AR.	+	AR.	+	AR.	+
	1 ^h 56 ^m	61° 58′	1 58m	41° 54′	2 ^h 2 ^m	23" 3'	2 h 4 m	34" 34'
Jan. o	3.54 38	108.9	33.23 16	60.9 2	16.12	15.4	21.85	47.9 0
10	3.10	109.5	33.07	61.1	16.01	15.1	21.72	47.9 2
20	2.76	109.5 6	32.89	61.0	15.89	14.7 6	21.57	47.7
30	2.37	108.9	32.70 19	00.5	15.75	14.I 6	21.40 16	47.2
Febr. 9	1.98		32.51	59.7	15.61	13.5	21.24	46.4
19	1.62	106.1	32.33	58.5	15.47	12.7	21.08	45.5 12
März 1	1.29 29	103.9 26	32.16	57.1 15	15.35 10	11.8	20.93	44.3
11 21	1.00	98.4	32.03	55.6	15.25	10.9 8	20.71	43.0
31	0.77	95.1 33	31.93 6 31.87 =	53.9 ₁₆ 52.3	15.17 15.14 _3	9.3	20.67	41.7 13
	10	35	1	10	1	0	0	13
April 10	0.51	91.6 88.0 36	31.88 6	50.7	15.15	8.7	20.67	39.1
20 30	0.49 8	83.8 42	31.94 14	49.2 14 47.8 19	15.20 12	$8.3 \frac{3}{8.0}$	20.72 20.85	37.0
Mai 10	0.57	80.1 37	32.27	46.8	15.32	8.1	21 02	36.4
20	0.94	76.5	32.51	46.1	15.68	8.4	21.24	36.1
30	30	35	32.80	45.8	24	6	26 21.50	36.1
Juni 9	1.24	73.0 69.8	22 14 34	45.8	15.92 ₂₈ 16.20	9.9	21.81	26 5 4
19	2 02 42	66.8	33.50	162	16.51 31	11.0	33	27.T
29	2.51	64.2 25	33.80	47.0	16.84 33	12.4	22.50	28.T
Juli 9	3.01	62.3	34.29	48.1	17.18 34	13.9	22.87	39.3
19	3.54	60.8	34.70	49.5	17.52	156	23.25	40.8
29	4.08	59.8	35.10	51.2	17.86	171	2062 31	12 5
Aug. 8	4.60	50.4	25.40	53.T	18.10 33	19.2	23.08	44.3 20
18	5.10	59.6	25.85	55.2 21	18.50 31	21.1	24.32 34	46.3 21
28	5.57	60.4	36.19 34	57.4	18.79	22.9	24.64	48.4
Sept. 7	5.98 26	61.8 18	36.50	59·7 ₂₄	19.06	24.7	24.93 26	50.5 21
17	6.34 ₂₈	63.6	36.77	62.1 24	19.29 23	26.4 15	25.19 22	52.6
27	6.62	65.9 26	37.01 20	64.5	19.50	27.9	25.41 20	54.7
Okt. 7	6.83	68.5 29	37.21 16	66.9 23	19.67	29.3	25.61	56.6
17	6.96	71.4	37.37	69.2	19.81	30.5	25.76	58.5
27	7.00	74.5 30	37·49 ₈	71.4 20	19.92	31.6	25.88 9	60.3 16
Nov. 6	6.96	77.5	37.57	73.4 18	19.99 5	32.5 8	25.97 5	61.9
16	6.86	80.4	37.61	75.2 16	20.C4 T	33.3 5	20.02	63.3
Dan 6	6.69	83.1	37.61	76.8	20.05	33.8	26.03 -	04.0
Dez. 6	6.45	85.5	37.57	78.2	2 0.04 5	34.2	26.01	e5.5 8
16	6.15	87.4	37.50 11	79.3 7	19.99	34·4 o	25.96	66.3
26	5.01	88.9	37.39 15	80.0	19.92	34.4	25.87 12	00.0
36	5.44	89.8	37.24	80.3	19.83	34.3	25.75	66.9
Mittl. Ort	1.68	94.8	33.16	45.6	15.91	5.5	21.69	34.5
sec 8, tg 8	2.129	-1.880	1.344	-1 0.898		+0.425	1.214	+ 0.689

Saudi.	76) 55 Ca	issiopej.	78) Lac.	μ Forn.	80) 67	Ceti.	85) =	Ceti.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR. 2 ^h 23 ^m 32.31 9 32.22 11 31.99 14 31.85 13 31.72 13 31.60 11 31.49 8 31.41 5 31.36 2 31.37 9 31.46 12 31.58 17 31.96 24 32.20 28 32.48 30 32.78 31 33.73 32 34.05 30 34.45 32 34.05 30 34.90 23 35.13 21 35.34 18	Dekl.
	2 ^h 7 ^m	66° 6′	2 ^h 9 ^m	31° 7′	2 ^h 12 ^m	6° 48′	2 ^h 23 ^m	8° 4'
Jan. o	38.33 ₃₆	82.8	5.46	60.8	39.08	81.18	32.31	19.7
10	37.97	XA X	5.31 16	61.7 9	38.98 ,,	81.9	22.22	19.2
20	37.56	$84.2 - \frac{4}{2}$	5.15	62.3	38.87	82.6	22.II	18.6
30	37.14	84.0	4.98	62.5	38.74	83.1	31.99 14	10.1
Febr. 9	36.71 43	83.4	4.80	62.2	38.61	83.3	31.85	17.6
19	36.30 38	82.3 16	4.64	61.6	38.48	83.4 -	31.72	17.2
März 1	35.92	80.7	4.49	60.5	38.36	83.3	21.60	16.9
11	35.60 32	78.7	4.35 10	59.1 17	38.26	82.9 6	21.40	10.0
21	35·35 ₁₆	76.4 24	4.25	57.4 21	38.18	82.3	31.41	16.5
31	35.19 6	74.0	4.18	55.3	38.13	81.4	31.30	16.6
April 10	35.13	71.5	4.16	52.9 26	28.12	80.3	21.24	16.8
20	35.18	60.0	4.17	50.3	28 15 3	70.0	21 27 3	17.2
30	25.25	66.2 27	1.24	47.2	28.21	77.3	28 21.46	17.0
Mai 10	25 62	64.2	1.36	41.2	28 27	75.6	21.58	18.8
20	35.02 36 35.98	62.3	4.53	41.3	38.54	73.6	31.75	19.9
30	36.43	60.9	22	38.3	38.75	71.6	21	21.2
Juni 9	26.06 53	59.8	4.75	25 1	38.99	69.4	22 20 24	227
19	27 54 50	59.2	5.29	226	20.26	672	- 40	212
29	28 17	59.0 -	5.60	200	39.56	65.T		26 x
Juli 9	38.82	59.3	5.93	27.8	39.87	63.0	4.	27.0
	66	8	35	20	32	20	32	10
19	39.48 67	60.1	6.28 6.62 ³⁴	25.8 16	40.19 31	61.0	3-	29.7
Aug. 8	40.15 65	. 101	6.96 34	24.2	40.50 31	59.2	2"	31.4
18	UI	63.0 20 65.0	7.28 32	23.0	30	57·7 13 56.4	21 25	33.1
28	41.41 41.99 58	67.3	7.58 30	22.3	41.11	10		34.7
	53	27	27	2	25	55.4	27	12
Sept. 7	42.52	70.0	7.85 24	22.3	41.63	54.7	- 3	37.2
17	42.99 41	72.9 30	8.09 21	23.0	41.86	54.4		38.2
01.4	43.40 34	75.9 32	8.30 16	24.2	42.05	54.3 -	***	39.0
Okt. 7	43.74 28	79.1 32	8.46	25.7 18	42.22	54.6	35.52 15	39.5
17	44.02	82.3	8.59	27.5	42.35	55.2	35.67	39.8
27	44.21	85.5	8.68	29.5	42.45 7	55.9	35.79 9	39.9
Nov. 6	44.33	88.7	8.72	31.7	42.52	56.8	35.88 6	39.9
16	44.36	91.7 28	8.74 -	33.9 ,,	42.57 ₁	57.9	35.94 3	39.7
26	44.31	94.5 25	8.72 6	36.0 20	T-1.7 2	59.0	35.97	39.4
Dez. 6	44.18	97.0	8.66	38.0	42.56	60.1	35.97	39.0
16	43.98 27	99.2	8.57	39.8	12.52	61.2	35.95 6	38.5
26	43.71	100.9	8.46	41.3	42.45	62.2 8	35.89 7	38.0
36		102.2	8.33	42.5	42.36	63.0	35.82	37.5
Mittl. Ort	38.29	62.3	4.63	53.8	38.57	81.6	31.87	14.1
sec 8, tg 8	2.470	+2.258		-0.604		-0.120	1.010	+0.142

	87) 36 H.	Cassiop.	90) p. I	Iydri.	89) v A	rietis.	91) 8	Ceti.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	2 ^h 29 ^m	72° 26′	2 ^h 33 ^m	79° 28′	2 ^h 33 ^m	21° 35′	2 ^h 35 ^m	o° 2'
Jan. o	44.54 49	40.4	35.42	93.7 8	52.77	18.7	1.85	43.3 8
10	44.05	41.8	34.27	94.5 2	52.68	18.5	1.77	44.I 6
20	43.50 59	42.7	33.06 126	94.7	52.56	18.2	1.66	44.7
Febr. 9	42.91 ₆₂ 42.29	43.0 4	31.80 122 30.58	94.3 9	52.44 52.29	17.8	1.53	45.2 45.6
	60	8	119	93.4	15	17.3	13	3
März 1	41.69 56	41.8	29.39 112	91.8	52.14	16.6	1.27	45.9
März 1	41.13 50	40.4 38.6	28.27 ₁₀₂ 27.25	89.8 87.3	52.00 12	7	1.14	46.0
21	10.22	36.5	26.35	84.4	51.78	15.3	0.02	45.9 ₂ 45.7 ₅
31	39.94	34.0	25.61 74	81.1 33	51.71	13.9	0.86	45.2
April 10	39.78	31.4	25.02		51.69	5	0.83	115
20	30.76	287	2162 40	74.0 36	51.71	13.4	085 2	44.5 8
30	30.87	26 T	24.41	70.2	51.78	12.8	O.O.T	12.6
Mai 10	40.16	23.4	1 _{24.40} ±	66.I 42	51.01	12.0	1 02	41.1
20	40.56	21.1	24.61	62.4 37	52.08	13.2	1.18	39.6
30	41.08 62	19.2	24.99	58.8	52.30 26	13.7	1.37	37.9
Juni 9	41.71	17.7	25.56 57	55.5 33	12.56	T4 5	I 60 23	36.I
19	42.42	16.6	26.30 74	50 F	52.84	15.5	1.86	34.2 20
2 9	43.21 79	16.0	27.18	40.0	$53.16 \frac{3^2}{33}$	16.7	2.15 29	32.2
Juli 9	44.03	15.8	28.19	47.7	1 53.49	18.1	2.45	30.3
19	44.90 86	16.2 8	20.20	46 T	53.82 33	19.6	2.77	28.4 18
29	45.76 87	17.0	30.45	45.0	54.17 35	21.2	3.08 31	26.6
Aug. 8	46.63 82	18.2	31.64	117	54.50	22.9 16	3.39 30	24.9
18	47.46	19.9	32.82	44.6	54.82 31	24.5 16	3.69 20	23.5
28	48.25	22.0	33.96	45.4	55.13	26.1	3.98 26	22.4
Sept. 7	48.99 68	24.3 27	35.00	46.7	55.41 26	27.7	4.24	21.5
17	49.67 59	27.0	35.92	48.5	55.67 23	29.2	4.48	20.8
27	50.20	30.0	30.09	50.9	55.90	30.5	4.69 19	20.5
Okt. 7	50.77 42	33.2 33	37.28	53.0	56.10	31.7	4.88 16	20.4
17	51.19	36.5	37.67	56.6 32	56.27	32.8	5.04	20.6
Nov 6	51.51 20	39.8	37.84	59.8	56.41	33·7 g	5.16	21.0
Nov. 6	J / TO	43.2	37.78	3 03.0	56.52 8	34.5 6	5.26 7	21.5
26	2	40.5	37.50	66.1 30	56.60 5	35.1 4	5.33 4	22.2
Dez. 6	51.79 14	49.7 ₂₈	37.01 68 36.33	69.1 26	56.65 I	35.5	5.37 1	23.1 {
	25	52.5	86	22	2	35.9	2	1
16 26	51.40	55.0 22	35.47	H- 6	56.64	36.1	5.36	24.7
26 36	51.05 45	57.2 58.8	34.47	75.6 12 76.8	56.59 7	36.1 ₁ 36.0	5.31 8	25.6
		30.0	33'34	75.0	39.54	30.0).~3	40.4
Mittl. Ort	44.03	19.1	29.31	80.6	52.36	8.7	1.29	46.7
sec o, tg ô	3.314	+3.160	5.479	-5.386	1.075	+0.396	I.000	0.00

	93) 🕅	Persei.	97) 7	Ceti.	98) µ	Ceti.	100) 41	Arietis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	2 ^h 38 ^m	48° 51'	2 ^h 39 ^m	14° 13′	2 ^h 40 ^m	9° 44′	2 ^h 44 ^m	26° 54'
Jan. o	15.39 16	57.2 8	59.62	36.7	14.72	56.9	51.99	20.7
10	15.23 20	58.0	59.51	37.8	14.63	50.5	51.90	20.7
20	15.03 22	58.3	59.39 14	38.6	14.53	56.0 5	51.78	20.6
Febr. 9	14.81	58.3 57.8 5	59.25 59.11	39.I ₂ 39.3	14.41	55.5 55.0	51.64 16	19.8
19	14.35	0	58.96	0	14.13	54.6	51.32	10.2
März 1	14.12 ~3	57.0 11 55.9 14	58.82	39.3 39.0 6	TL02 13	54.2	51.17	T8 4
11	12.02	54.5	58.60 13	38.4	13.88	52.0	51.04	17.6
21	13.76	52.8	58.58	37.6	13.78 6	53.7	50.93	16.7 8
31	13.65	51.1	58.51	36.4	13.72	53.7	50.85	15.9
April 10	13.60	49.2	58.47	35.0	13.69 -	53.8	50.81 -	T5.T
20	13.61	47.4	58.47	33.3	13.70 6	54.T	50.82 6	14.4
30	13.69	45.7 16	58.51	31.4	13.76	54.6 8	50.88	13.9
Mai 10	² 13.85 ₂₂	44.I	58.61	29.2	³ 13.88 ¹²	55.4 ro	51.01	13.6
20	14.07	42.8	58.75	26.9	14.04	56.4	51.18	13.5 -
30	14.35	41.9 6	58.93	24.5	14.24	57.5	51.39 26	13.7
Juni 9	14.68 33	41.3	59.16	22.1	14.47 27	58.9	51.65	14.1
19	15.05 41	41.0	59.41	19.7	14.74	60.4 16	51.94 32	14.8
Z-1: 29	15.46	41.1	59.69 30	17.3 22	15.03 31	62.0	52.26 33	15.7
Juli 9	15.89	41.6	59.99	15.1	15.34	63.7	52.59	16.9
19	16.34	42.4	60.31	13.0	15.66	65.4 17	52.94 36	18.2
29	10.79	43.5	00.02	11.2 16	15.90 32	67.1 16	53.30 24	19.6
Aug. 8	17.24	45.0	00.94	9.6	10.30	68.7	53.04 24	21.2 16
18 28	17.07	46.7	61.24 29	8.4 8	16.61	70.2	53.98 32	22.8 16
	18.08	48.6	61.53	7.6	16.90	71.6	54.30 30	24.4
Sept. 7	18.46	50.7 22	61.80	7.1	17.17	72.8 10	54.60 28	26.1
17	10.01	52.9 24	62.04 22	7.1	17.42	73.8 8	54.88 25	27.7
Okt. 7	19.13 28	55.3 24	62.26	7.4 6 8.0	17.65 19	74.6	55.13 22	29.2 30.6
Okt. 7	19.41	57·7 60.1	62.45 16 62.61	9.0	18.01	75.2 75.6	55·35 19 55·54	31.9
	19	24	13	12	14	2	10	12
Nov. 6	19.83	62.5	62.74	10.2	18.15	75.8	55.70 13	33.1
16	19.98 10	64.8	62.83 6 62.89	11.7	18.26 8 18.34 5	75.8 2	55.83 9	34.1 9
26	20.13 5	60 T	62.92 3	13.2	T8 20	75.6 ² 75.4 4	55.92 6 55.98	35.0 8 35.8 6
Dez. 6	20.14	70.9	62.92	16.3	18.41	75.0 4	56.01 3	35.0 6 36.4
	5	16	3	15	2	4	1	5
16 2 6	20.00 9	72.5	62.89 6 62.83 0	17.8	18.39	74.6	56.00	36.9
36	19.86	73.7 9 74.6 9	62.74	19.1 20.2	18.35	74.2 73.7	55.95 55.88 7	37.2 37.4
Mittl, Ort	14.99	40.0	58.88	36.0	14.20	50.4	51.53	9.1
sec ô, tg ô	1.520	+1.145	1.032	-0.253	1.015	+0.172	1.121	+0.507

	101) β F	ornacis.	102) τ^2	Eridani.	103) τ I	Persei.	104) η E	ridani.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	2 ^h 45 ^m	32° 45′	2 ^h 47 ^m	21° 21′	2 ^h 48 ^m	52° 24′	2 ^h 52 ^m	9° 14′
Jan. o	27.99	80.5	6.37	46.6	5.35 18	43.7	11.31	36.9 10
10	27.85 16	81.8	6.26	47.8	5.17	44.6	11.22	37.9 8
20	27.69 18	82.7	6.13	48.7	4.96	45.2 _I	11.11	38.7 6
30	27.51	83.2	5.98 16	49.2	4.72 26	45.3 -	10.98	39.3
Febr. 9	27.32	83.2	5.82	49.4 -	4.46	45.0	10.84	39.6
19	27.12	82.8 8	5.66	49.3	4.20	44.2	TO.60	30.8
März 1	26.04	82.0	5 50	48.9 8	3.05	12.2	10.55	39.7
11	26.77	80.8 16	5.26	48.r	3.72	41.8	10.42	39.3
21	26.63	70.2	5.24	46.9	2.53	40.1	10.31	28.7
31	26.52	77.2	5.15	45.5	3.39	38.2 19	10.22	37.8
April 10	26.44	75.0	5.09	127	3.32	36.3	10.17	36.7
20	6 4	72.5	5.08 -	41.7	0.07	214	10.17	25 4 43
30	26 11	69.7	5.11	20.5	2 27	32.6	10.20	22.8
Mai 10	26.52	66.4 33	45.20	26.8 -1	5 2.52	207	10.20	21.8
20	26.65	63.4	5.33	34.2	3.74	29.I	10.43	29.8
	17	31	17	20	28	II	17	2.1
T: 30	26.82	60.3	5.50 22	31.6	4.02	28.0 9	10.60	27.7
Juni 9	27.04 26	57·3 3°	5.72 24	28.9 27	4.36 39	27.I 26.6 5	10.81	25.5
19	27.30 29	54.3 27	5.96 28	26.2	4.75 42	T	11.06	23.3
Juli 9	27.59 32	51.6	6.24 31	23.7	5.17 46	26.5 - 26.7	11.33 30	18.9
Jun 9	27.91	49.1	6.55	21.3	5.63	7	31	20
19	28.24	46.9 19	6.86	19.2	6.10	27.4	11.94 31	16.9
29	20.50	45.0	7.10 32	17.3	0.50	28.3	12.25 31	15.1
Aug. 8	28.92	43.7 9	7.50 22	15.8	7.05 46	29.6	12.50	13.5
18	29.20	42.8	7.82 30	14.7 6	7.51	31.2 18	12.80	12.2
28	29.57	42.4	8.12	14.1	7.96	33.0	13.16	11.3
Sept. 7	20.87	42.5 6	8.39 26	$13.8 - \frac{3}{2}$	8.28	35.1 22	13.43	10.7
17	30.14	43.1	8.65	14.0 6	8.76 38	37.3 23	13.68	10.4
27	30.38 21	44.1	8.87 20	14.6	9.11 35	39.6 25	13.90 20	TO.5
Okt. 7	30.59 16	45.6	9.07 16	15.6	9.42 31	42.1 25	14.10	TO.O
17	30.75	47.5	9.23	16.9	9.09	44.0	14.27	0.11
27	30.88	49.6	9.37	18.5	9.91	47.I	14.41	12.6
Nov. 6	30.07	51.0	0.16	20.3	10.08	40.6	TA 52	13.7
16	1 1 11 =	54.3	0.52	22.2	10.20	52.0	14.60	15.0
26	31.03	56.7	0.55	2.1.T	10.27	512	14.65	16.2
Dez. 6	31.00	59.0 23	9.54	26.0	10.28	56.3	14.66	17.7
16	6	20	3	18	4	17	14.65	1
2 6	10	61.0	9.51	27.8 16	10.24	58.0	14.60	20.2
36	12	62.9	9.44 ₁₀ 9.34	30.7	9.99	59·5 60.7	14.53	20.3
30	30.72		7.24	30./	9.99		*4.33	7-14
Mittl. Ort		75.1	5.52	44.2	4.83	25.8	10.58	38.1
sec 8, tg 8	1.189	-0.644	1.074	-0.391	1.639	+1.299	1.013	-0.16

NAME OF THE OWNER, OWNE	105) 47 1	I. Cephei.	106) 9 E	ridani.	107) α	Ceti.	108) γ Ι	ersei.
1913	AR.	Dekl. -ŀ-	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	2 ^h 54 ^m	79° 4′	2 ^h 54 ^m	40° 38′	2 ^h 57 ^m	3° 44′	2h 58m	53° 9′
Jan. o	29.80	56.5	58.95	76.8	44.43 8	61.4	29.81	77.3 11
10	29.03 80	I C X A	58.78 19	78.2 14	44-35	60.8	29.64	78.4 6
20	28.14	59.7 8	58.59	79.2	44.25	60.2	29.43	79.0 2
30	27.16	60.5	58.38	79.7	44.13	59.6	29.18	79.2
Febr. 9	26.14	60.6 _	58.15	79.7	43.99	59.2	28.92	79.1
19	25.12 98	60 T	57.92	79.3	43.85	58.9	28.65	78.5 10
März 1	24.14	59.1	57.70	78.3	43.71	50.0	28.39	77.5 ,2
11	23.24	5 to 5	57.49 18	76.9 18	43.58	58.6	28.15	70.2 16
21	22.48 60		57.31	75.1	43.47 8	58.7	27.94 15	74.6
31	21.88	53 1 26	57.17	72.9	43.39	58.9	27.79	72.8
April 10	21.48	50.5	57.07 6	70.4 28	43.35 ₁	59.3 6	27.70	70.9
20	21.28	47.7	57.01	67.6	43.34	59.9	-// 5	68.9
30	21.31	44.9 30	57.01 6	04.0	43.38	60.8	27.72	67.0
Mai 10	21.59 47	41.9 26	657.07 11	01.1	43.47	61.9	⁷ 27.86 ¹⁴ ₂₀	65.1 16
20	22.06	39.3	57.18 16	57.8 33	43.61	63.2	28.06	63.5
30	22.74 86	37.0 20	57.34 22	54.5	43.79 21	64.6	28.33	62.3
Juni 9	23.60		57.56	51,2	44.00 25	66.2	28.07 28	61.3
19	24.60	33.4	57.81	40.1	44.25 28	67.9 18	29.05	60.7
Juli 9	25.74	32.3	58.11 33	45.2 26	44.53	69.7	29.47 46	00,4
Juli 9	26.96		58.44 35	42.6	44.83	71.4	29.93	60.5
19	28.26	31.4 -	58.79 35	40.3 18	45.14 31	73.2	30.41 48	60.8
29	29.59	31.7 8	59.14	38.5	45.45	74.9 16	30.89	01.7
Aug. 8	30.93	32.5	59.51 26	37.2	45.70	76.5	31.30	62.9
18 28	32.26		59.87 34	36.3	40.07	77.9	31.85 46	64.3
	33.54	35.4	60.21	36.1 -	46.37	79.1	32.31	66.0
Sept. 7	34.76	37.5 24	60.54	36.3 8	46.64 26	80.1 8	32.74 40	67.9 2
17	35.89	39.9 28	60.83 26	37.1	46.90	80.9	33.14	70.1
Okt. 7	36.92		61.09 23	38.4 18	47.13 20	81.3	33.51	72.3 2
	37.82	45.7 33	61.32	40.2	47.33	81.5 81.6	33.84 29	74.8 2
17	38.57		61.50	42.3	47.51	3	34.13	77.2
27	39.17	52.4 34	61.64 10	44.8 26	47.67	81.3	34.37 20	79.7 2
Nov. 6	39.00	55.8 35	61.74	47.4 27	47.79 9	80.9	34.57	82.2
16	39.83	59.3 34	01.79	50.1	47.88 6	80.4 6	34.71 8	84.6
Dez. 6	39.88	02.7	61.79	52.8 26	47.94	79.8	34.79	86.9
	39.74	65.9 30	61.75	55.4	47.98 -	79.0	34.82 = 3	89.0
16	39.40	68.9	61.67	57.7	47.97 3	78.3	34.79	90.8
2 6	30.07 6	71.4 22	61.55	59.8 16	47.94 6	77.6	34.70	92.4
36	38.20	73.6	61.40	61.4	47.88	76.9	34.56	93.6
Mittl. Ort	28.14	34.9	57.66	70.1	43.78	56.3	29.18	59-4
sec 8, tg 8	5.277	+5.181	1.318	-0.859	1.002	+0.066	1.668	+1.33

_	109) p	Persei.	110) µ H	forologii.	111) β	Persei.	114) ô A	rietis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	2 ^h 59 ^m	38° 30'	3 ^h 1 ^m	60° 3′	3 2 m	40° 37'	3 ^h 6 ^m	19° 23′
Jan. o	36.32	28.6	35.88	99.3	30.73	31.5	39.68	63.7
10	36.21	29.2	35.56	100.8	30.62	32.1	39.01	63.6
20	36.07	29.4	35.20	101.8	30.47	32.5	39.50	03.3
30	35.90 18	29.4	34.81	102.2	30.30	32.5	39.38	03.0
Febr. 9	35.72	29.1	34.40	101.9	30.11	32.2	39.24	62.6
19	35.53	28.5	34.00	101.2	29.91	31.7	39.09	62.1
März 1	35.34	27.6	33.61 39	000	29.71	30.8	38.94	6r.6
II	35.17	26.6	33.25	98.1	29.53	29.8	38.80	01.1
21	35.02	25.4 13	32.92 28	95.8 26	29.38	28.5	38.68 10	0.00
31	34.92	24.1	32.64	93.2	29.26	27.2	38.58	60.1
April 10	34.86	22.8	32.42	QO. I	29.20	25.8	38.53	59.7
20	34.85	21.5	32.27	86.8 33	29.18	24.4	38.52	59.5
30	34.90	20.3	32.20	83.3 35	29.23 5	23.1	38.56	59.4
Mai 10	35.02	19.2	32.20	79.3	29.35	21.9	38.66	59.5
20	35.19	18.5	32.28	75.6 36	29.52	21.0	38.79	59.8
30	35.41	17.0	32.43	72.0	20.74	20.3	28.08	60.3
Juni 9	35.68	17.7	32.66	68.5 35	30.0T	20.0	39.20 26	6T.T
19	35.99	17.7	32.06	65.1 34	30.33	19.9	30.46	62.0
29	36.33	18.0	33.32	62.1 30	30.68 35	20.I	30.76	63.1
Juli 9	36.70	18.7 7	33.73	59.5	31.00	20.6	40.07	64.3
19	37.09	10.5	34.18	57.3	31.45	21.4	40.40	65.7
29	37.48 39	20.6	34.66	55.6	31.85	22.1	40.73 33	67.1
Aug. 8	27 87 39	22.0	35.15	54.4	32.25	23.7	41.06 33	68.6
18	a0 ar 30	2.2 5	25.65	53.0	22.64 39	25.1	41.30 33	70.1
28	38.61 36	25.1 16	36.13	53.9	33.02	26.8	41.70 31	71.5
Sept. 7	38.96	26.8	36.58	54.6	35	28.5	42.00	72.8
17	39.28 32	28.6	37.00 42	EE 8 ***	33·37 33·70	30.3	42.28 28	74.0
27	39.57	20.5	37.37 37	57.6	24 OT 3*	32.2	12.52	75.1
Okt. 7	39.84	22.2	37.68 31	50.0	24.20	34.1	12.76	76 1
17	40.07	34.1	37.93	62.6	34.53	36.0	42.06	76.9
· ·	20	18	17	29	20	19	18	
Nov. 6	40.27	35.9 17	38.10 11	65.5 68.6	34.73	37.9 18	43.14 15	77.5
16	40.43	37.6		22	34.90	39.7	43.29 11	78.1 78.5
26	40.55 8	39.1	38.23 38.18 ⁵	71.8 32	35.02 9	41.4 16	43.48	78 R
Dez. 6	40.67	41.9	38.07	75.0 29	35.11	43.0		79.0
	.0	11	19	77.9 26	35.15	44.4	43-53	
16	40.67	43.0	37.88	80.5	35.15	45.6	43.54 3	79.0
2 6	40.63	43.9	37.03	82.8	35.10 8	46.6 7	43.51	79.0
36	40.54	44.6	37.33	84.6	35.02	47.3	43.46	78.9
Mittl. Ort	35.76	14.0	33.63	89.9	30.15	16.3	39.06	54.0
seco, tgo	1.278	+0.796	2.004	-1.737	1.317	+0.858	1.060	+0.352

	117) 12]	Eridani	115) 481	I Caphoi	120) α	Persei.	121) 0	Tanri.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	3 ^h 8 ^m	29° 19'	3 ^h 9 ^m	77° 24'	3 ^h 18 ^m	49° 33′	3h 20m	8° 43'
Jan. 0 10 20 30 Febr. 9 19 März 1	23.54 12 23.42 14 23.28 17 23.11 18 22.93 19 22.74 18 22.56 18	49.9 51.3 10 52.3 7 53.0 3 53.3 2 53.1 52.6 10	16.09 61 15.48 73 14.75 82 13.93 87 13.06 89 12.17 86 11.31 79	82.8 84.3 9 85.2 85.6 4 85.6 3 85.3 9	7.02 13 6.89 17 6.72 21 6.51 23 6.28 25 6.03 25 5.78 23	25.3 11 26.4 7 27.1 4 27.5 0 27.5 4 27.1 8 26.3 11	8.49 6 8.43 10 8.33 12 8.21 13 8.08 15 7.93 14 7.79 15	30.9 30.4 5 29.9 5 29.4 4 29.0 4 28.6 28.3 28.1
21 31 April 10 20 30	22.38 22.23 13 22.10 8 22.02 5 21.97 0 21.97	51.6 13 50.3 17 48.6 20 46.6 44.3 25 41.8 27	9.83 56 9.27 40 8.87 21 8.66 8.64 2	79.0 76.5 73.8 28 71.0	5.55 20 5.35 16 5.19 10 5.09 5 5.04 $\frac{5}{2}$	25.2 13 23.9 16 22.3 17 20.6 17 18.9 17 17.2 16	7.64 12 7.52 10 7.42 6 7.36 2 7.36 6	28.0 ° 28.2 ° 28.5 ° 4 28.9 ° 7
Mai 10 20 Juni 9 19	22.02 H 22.13 I5 22.28 20 22.48 23 22.71 27	39.I 35.9 32.9 30 29.9 27.0 28	8.81 9.20 55 9.75 10.46 85 11.31	68.3 29 65.4 23 63.1 21 61.0 17 59.3 11	5.15 18 5.33 24 5.57 29 5.86 34 6.20 34	15.6 14.0 12 12.8 11.8 6 11.2	7.42 13 7.55 16 7.71 20 7.91 24 8.15 27	30.6 11 31.7 13 33.0 14 34.4 15
Juli 9 19 Aug. 8 18	22,98 30 23,28 31 23,59 33 23,92 33 24,25 33 24,58 31	24.2 21.7 23 19.4 20 17.4 16 15.8 11	12.28 97 13.34 112 14.46 118 15.64 120 16.84 118	57.2 56.8 $\frac{4}{1}$ 56.9 $\frac{5}{5}$ 57.4 $\frac{5}{10}$	7.44 7.89 8.34 8.80	10.8 10.8 11.2 11.8 12.8 14.0	8.42 29 8.71 31 9.02 31 9.33 32 9.65 31 9.96 33	35.9 15 37.4 16 39.0 16 40.6 15 42.1 13 43.4 12
28 Sept. 7 17 27	24.89 31 25.20 28 25.48 25 25.73 22	$ \begin{array}{c} 14.1 \\ 14.0 \\ \hline{}\\ 14.3 \\ 9\\ 15.2 \end{array} $	19.17 19.28 20.28 21.32 22.28	59.9 61.8 64.1 26	9.24 42 9.66 40 10.06 36 10.42 34	15.5 16 17.1 19 19.0 20 21.0 21	10.26 30 10.55 27 10.82 25 11.07 23	44.6 II 45.7 8 46.5 6 47.1 4
Okt. 7 17 Nov. 6	25.95 19 26.14 15 26.29 12 26.41 8 26.49	16.4 17 18.1 19 20.0 22 22.2 23 5	23.13 23.86 60 24.46 24.91	72.6 31 72.6 32 75.8 34	10.76 11.05 26 11.31 11.52 17	23.I 21 25.2 22 27.4 22 29.6 22 31.8 20	11.30 21 11.51 17 11.68 15 11.83 12	47.5 2 47.7 0 47.7 1 47.6 3
Dez. 6 16 26 36	26.53 4 26.53 4 26.49 7 26.42 7 26.31	24.5 26.8 ²³ 29.1 ²¹ 31.2 19 33.1 16 34.7	25.21 25.34 25.29 25.08 24.69 24.17	85.9 33 89.1 29 92.0 26	11.80 11.80 11.86 11.87 11.82 11.72	37.5 15 39.0 12	11.95 9 12.04 6 12.10 2 12.12 2 12.10 5	47·3 46·9 5 46·4 5 45·9 45·4 6 44.8
Mittl. Ort	22.46	46.5 0.562	14.22	59.8 +4.480	6.25	8.5 +1.173	7.76	23.9 +0.153

	122) 2 II.	Camelop.	125) f	Tauri.	127) E l	Eridani.	131) 8	Persei.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	3 ^h 21 ^m	59° 38′	3 ^h 26 ^m	12° 38′	3 ^h 28 ^m	9° 44′	3" 36"	47° 30′
Jan. o	61.77	35.9	4.79 6	29.0	50.75	65.7	44.36	53.0
10	61.58	37.4	4.73	28.6	50.68	66.9	44.26	54.1 8
20	61.33	38.5 7	4.64	28.3 3	50.57 12	67.8 7	44.11	54.9 5
30	61.04	39.2 '	4.52	27.9	50.45	08.5	43.92 21	55.4
Febr. 9	60.72	39.3 -	4.38	27.5	50.30	69.0	43.71	55.5
19	60.39	39.1 8	4.23	27.I	50.15 16	69.3	43.48	55.3 6
März 1	60.05 34	38.3	4.08 14	26.7	49.99 16	60.3	43.24 23	54.7 9
11	59.73	37.2 16	3.94	26.4 3	49.83	69.0 3	43.01	53.8
21	59.46	35.6	3.81 10	26.2	49.70 12	68.5	42.80	52.6
31	59.23	33.8	3.71	26.0	49.58	67.7	42.63	51.3
April 10	59.08 8	ат.8	3.64	26.0	49.50	66.7	42.51 6	49.7 16
20	59.00	29.7	$3.61 - \frac{3}{2}$	26.1	49.46	65.4	42.45	48.1 16
30	59.00 10	27.5 21	3.63 6	26.3	49.46	63.9 17	42.45 6	46.5 15
Mai 10	59.10 20	25.4 21	3.69	26.8 7	49.50	62.2	42.51	45.0 15
20	59.30	23.3	3.81	27.5	49.60	60.1	42.66	43.5
30	59.56	21.6	3.97	28.4	49.74	58.0	12 86	12.2
Juni 9	50.01 35	20. T	4.18	20.4	40.02	55.8	42.12	41.3
19	60.32	19.0 8	4.41	30.6	50.12	52.6	43.44 36	40.6
29	60.78	18.2	1.68 4	21.0	50.38 25	5I.4 ₂₁	12 80	40.2
Juli 9	61.29 51	17.8	4.97	33.3	50.65	49.3	44.19	40.I -
19	61.82	17.8	5.28	34.7	50.95	47.3	44.60	40.3
29	62.28 56	18.2	5 60 34	36.2	5T.25	151 19	45.04	108 5
Aug. 8	62.04 50	180 7	5.02	37.6	5T 55 30	42.8	45.48	41.6
18	63.50	20.0	6.24	38.0	FT 86 31	12.5	45.92	12.6
28	64.05 55	21.3	6.55	40.2	52.16	41.5	46.35	43.8
Sept. 7	64.57	23.0	6.84 29	41.3	52.44	40.9	46 76	14
17	65 07 50	24.9	7 12	122	52.71	40.6	1m 76 40	168
27	65.53	27.I	7.38	43.0	52.06	40.7	47.54	48.6
Okt. 7	65.96 43	20.5	7 62	43.5	52 T8	4T.T	47.88	50.5
17	66.33 37	31.9	7.83	43.9	53.38	41.8	48.19 31	52.4
27	66.65	20	8.02	2	17	11	48.46	19
Nov. 6	66.91	34.5 27	8.18	44.I	53.55	42.9	18 70	54.3 20
16	67.11	37.2 26	8.30	44.2 1 44.1	53.69 12 53.81 8	44.1	48.88	58.3
2 6	67 25	39.8 26	8.40	44.0	52.80	45.5	10.02	60.2
Dez. 6	67.31	44.9	8.47	43.7	53.93	48.5	49.11	62.1
	1	22	2	3	1	15	4	16
16 26	67.30	47.1	8.49 -	43.4	53.94 2	50.0	49.15 2	63.7
36	67.21	49.1	8.48	43.0	53.92 6	51.4	49.13 7	65.2 12
30	07.07	50.8	8.44	42.7	53.86	52.7	49.06	00.4
Mittl. Ort	60.78	17.3	4.04	2 0.9	49.85	68.1	43.46	36.8
sec ò, tg ò	1.978	+1.707	1.025	+-0.224	1.015	-0.172	1.481	+1.092

5023	134) v	Persei.	138) 5 H.	Camelop,	139) η	Tauri.	140) τ ⁶ Ε	ridani.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	3 ^h 39 ^m	42° 18′	3 ^h 41 ^m	71° 3′	3 ^h 42 ^m	23° 50′	3 ^h 43 ^m	23° 29′
Jan. o	17.56 8	31.5	11.08	75.2 21	19.40	23.6	7.36	82.2
10	17.48	32.4 6	10.70	77.3	19.35 g	23.7	7.28	83.9 12
20	17.35 16	33.0	10.30 48	79.0	19.26	23.8	7.16	85.1
Febr. 9	17.19 19	33.4	9.90 53	80.1 6	19.14	23.6	7.01 16 6.85	86.1 86.7
Febr. 9	17.00	33.4	9.37	0	19.00	23.4	18	3
19	16.79 22	33.2 6	8.80	80.7	18.84	23.1	6.67 18	87.0
März 1	16.57 20	32.6	8.23	80.3	18.67 16	22.7	6.49	86.9
21	16.37 19	31.8	7.69 49	79.3	18.51	22.2 6	6.31 17	86.3 8
31	16.03	30.8 12 29.6	6.78 42	77.8	18.25	21.6	6.14	85.5 12
	11	13	32	75.9	9	6	11	10
April 10	15.92 5	28.3	6.46	73.7	18.16	20.5	5.89 7	82.7 18
20	15.87	26.9	6.26 8	71.4	18.12	20.0	5.82 3	80.9 21
Mai 10	15.87 6	25.6	6.18 - 5	68.9 26	18.12 18.17	19.7	5.79	78.8 23
20	15.93 14	24.3	18 6.44 2I	63.6 27	18.29	19.5	19 5.88 8	76.5 28
	18	23.1	32	23	15	19.4	11	73.7 26
30	16.25 24	22.2	6.76	61.3	18.44 20	19.5	5.99 16	71.1 28
Juni 9	16.49 29	21.5	7.20 55	59.3 18	18.64	19.8 6	6.15	68.3 27
19	16.78 33	21.1	7.75 63	57.5	18.89	20.4 7	6.36	65.6 26
Juli 9	17.11 36	20.9	8.38 71	56.1 10	19.16 19.46	21.1 8	6.59 27	63.0 60.5
	17.47 39	20.9	9.09 76	55.I 7	33	21.9	29	23
19	17.86	21.3 6	9.85 80	54.4 2	19.79 33	22.9 10	7.15	58.2 20
29	18.20	21.9	ro.65 83	54.2 =	20.12	23.9 12	7.40	56.2 17
Aug. 8	18.67 41	22.8	11.48 84	54.4 7	20.46 20.80 34	25.1	7.77	54.5 13
28	19.08 39	23.8	12.32 83	55.1 56.1	21.13	26.3	8.08 31	53.2
_	19.47	25.0	81	15	32	27.5	30	52.3
Sept. 7	19.86	26.4	13.96	57.6	21.45	28.7	8.69	51.9
17	20.23 25	27.9 17	14.73	59.3	21.76 29	29.8 10	8.98 27	52.0
Okt. 7	20.58 32	29.6	15.46 67 16.13 60	61.4	22.05 26	30.8 10	9.25 24	52.5 10
Okt. 7	20.90 29	31.2 16	16.73	63.8 ²⁴ 66.4	22.31	31.8 8 32.6	9.49	53.5 13
	21.19 26	32.0	52	28	22.55	32.0	9.71	54.8
27	21.45 21	34.5	17.25	69.2	22.77	33·4 ₆	9.89	56.5 20
Nov. 6	21.66	36.2	17.08	74.4	22.96 16	34.0 6	10.04	58.5 22
16 26	21.84 15	37.9	18.01	75.2 31	23.12	34.6	10.16	60.7 22
Dez. 6	21.99 9	39.6	18.23	78.3 29 81.2	23.24 9	35.1 4	10.25	62.9 22
	4	41.1	2	28	23.33	35.5	10.29	65.1
16	22.12	42.5	18.32	84.0 26	23.37 I	35.8 2	10.30	67.3 20
26	22,11 5	43.7 10	18.19 25	86.6	23.38	36.0	10.26	69.3 18
36	22.06	44.7	17.94	88.8	23.34	36.2	10.20	71.1
Mittl. Ort	16.69	16.4	9.23	55.8	18.60	12.6	6.24	82.0
sec 8, tg 8	-	10.910		+2.915	1.093	+ 0.112		-0.435

	141) β Β	eticuli.	143) g l	Eridani.	146) γ	Hydri.	144) Ç I	Persei.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	3 ^h 43 ^m	65° 4′	3 ^h 46 ^m	36° 27′	3 ^h 48 ^m	74° 29′	3 ^h 48 ^m	31° 37
Jan. o	9.28	56.9 20	13.29	50.4	39.38 64	88, I 20	40.44 5	46.5
10	8.91	58.9	13.17	52.3	38.74 75	90.1	40.39 10	47.0
20	0.40	60.4	13.01	53.7	37.99 8	91.5	40.29	47-3
30	8.00	61.3	12.82	54.8	37.18 86	92.4	40.16	47.4
Febr. 9	7.50 52	$61.6 = \frac{2}{2}$	12.62	55.5 x	36.32 ₈₇	$92.7 - \frac{3}{3}$	40.00	47.4
19	6.98	61.4 8	12.39 23	55.6 -	35.45 87	92.4	39.83 18	47.1
März 1	6.47 50	60.6	12.16	55.3 8	34.58 84	91.6	39.65 18	40.7
11	5.97 47	59.3 18	11.94 20	54.5	33.74 80	90.2	39.47 16	46.1
21	5.50	57.5 24	11.74 18	53.3 16	32.94 72	88.3	39.31	45.4
31	5.08	55.1	11.56	51.7	32.22	86.0	39.18	44.6
April 10	4.73	52.4	TTAL	10.7	21 50	82.2	30.08	12.8
20	4.44 20	40.4	11.30	47.4 26	31.07	80.2	30.03	42.9
30	4.24	46.1 33	11.25	44.8 20	30.67 40	76.9^{33}	30.02	42.I
Mai 10	4.12	42.6 35	11.24	41.9	30.40	73.4 36	39.07 5	41.4
20	4.09 -	38.6	¹⁹ 11.29 5	38.6 33	30.27	69.8	39.17	40.9
30	4.16	34.9 36	11.39	35.4	30.29	65.8 40	39.34	40.5
Juni 9	4.33	31.3	TT 55	32.2	20.45	62.2	20.55	40.4
19	4.58	27 8 33	11.75	20 T	30.74	58.7 35	30.80	40.4
29	4.01	24.6	77.00	26 T	31.17	55.5 32	40.00	40.7
Juli 9	5.31	21.6	12.27	23.3	31.71	52.6	40.41 32	41.1
19	5.78	25	12.57	20.8	22.25	50.1	40.75	41.8
29	6.28 50	19.1	12.89	T87	32.35 ₇₂ 33.07 ₇₈	48.1	41.10 35	12.6
Aug. 8	6.82. 54	15.5	13.23	16.9	22 85	46.6	AT 46 30	12.6
18	708 50	14.5	13.57	15.6	21 60	45.7	17 82 30	44.6
28	7.38 ₅₆ 7.94	14.2	13.91	14.9	35.50	45.4	42.18 36	45.8
α .	55	3	33	2	03	3	34	1
Sept. 7	8.49 52	14.5	14.24 32	14.7	36.33 77	45.7 10	42.52 33	47.0
17	9.01 47	15.4	14.56 29 14.85 26	16.0 9	37.10 71 37.81 62	46.7 16 48.3	43.16 31	
Okt. 7	9.40 42	180 20	15.11	17.3	38.44	50.4	12 16 30	ECTA
17	10.25	21.5	15.34	19.2	38.96 52	52.9	43.72	51.8
,	27	29	20	22	38	30	24	1
27	10.52	24.4 31	15.54 16	21.4 25	39.34 25	55.9 32	43.96 20	
Nov. 6	10.70	27.5	15.70	23.9 26	39.59 10	59.1 33	44.16	54.0
16	10.80	30.0	15.01	26.5 28	39.69 -	62.4 34	44.34 14	55.0
Dez. 6	10.80	34.2 32	15.88		39.64 20	65.8 34	44.48	56.0
	10.71	37.4	15.91	32.1	39.44	09.0	44-57 6	
16	10.53	40.4 27	15.89 6		39.09	72.0	44.63	57.6
26	10.26	43.1	15.83	37.1	38.60 60	74.7	44.64	58.3
36	9.92	45.4	15.73	39.2	38.00	77.0	44.61	58.8
Mittl. Ort	6.26	50.2	11.89	47.7	34.45	81.3	39.58	33.8
miles Oil)	1	T1.1	CL.L.C		33.3	22.0

	145) 9 H.	Camelop.	147) ε	Persei.	148) ξ	Persei.	149) y E	ridani.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. 十	AR.	Dekl.
	3 ^h 49 ^m	60° 51′	3 ^h 51 ^m	39° 45′	3 ^h 53 ^m	35° 32′	3 ^h 53 ^m	13° 44′
Jan. o	43.86	36.0 18	61.60	48.0	19.88	43.5 6	59.20 6	77.3
10	43.71 22	37.8	61.54	48.9 6	19.83	44.T 5	59.14 10	78.7
20	43.49 20	39.2	61.43	49.5	19.73	44.6	59.04	79.9
30	43.20 32	40.I	61.28	49.9	19.59 16	44.9	58.92	80.8
Febr. 9	42.88	40.6	61.10	50.0 -	19.43	44.9	58.78	81.4
19	42.53 of	40.7	60.91	49.8	10.24	44.7	58.62	81.7
März i	42.17	40.3	60.70	40.4	10.05	44.3 6	58.45	81.8
II	41.83 34	30.4	60.50	48.7 7	т8.86	43.7 8	58.28	81.5
21	41.51	38.1 16	60.31	47.0	18.69	42.0	58.13	81.0 8
31	41.24	36.5	60.16	46.8	18.55	42.0	58.00	80.2
April 10	41.04	247	60.04	45.7	T8 44	41.0	57.89	79.1
20	40.91	34.7 21	59.98	11 1 13	18.38	40.0	57.82 7	מ מת
30	40.86	20.5	59.97	12.2	18.37	39.0	57.80 -2	76 T
Mai 10	40.91	28 4	60.01	12.T	18.41	28 T	F17 82 "	74.2
20	41.04	26.3	60.12	41.1	18.51	37.3	57.88	72.2
	20 24	21	21 18	9	21 17	0	21 12	24
T . 3°	41.28	24.2	60.30	40.2	18.68	36.7	58.00 16	69.8
Juni 9	41.59 38	22.5	60.52	39.6	18.89 26	36.3 2	58.16	67.6
19	41.97 45	21.0	60.79	39.2	19.15	36.1	58.35	65.2
Juli 9	42.42 49	19.9	61.10	39.0	19.44	36.1	58.58 26	62.9
Juli 9	42.91	19.2	61.44	39.1	19.77	36.4	58.84	60.6
19	43.45 56	18.8	61.81	39.4 6	20.12	36.9 6	59.12	58.5 19
29	44.01 58	$18.7 - \frac{1}{3}$	62.19	40.0	20.49 37	37.5	59.41 31	56.6
Aug. 8	44.59 50	19.0 7	62.58 39	40.7	20.86 37	38.4	59.72	54.9 12
18	45.18 59	19.7	62.98 40	41.6	21.23 37	39.3	60.02 30	53.0
28	45.75	20.7	03.30	42.7	21.00	40.4	00.32	52.6
Sept. 7	46.32	22.0	63.74	43.9	21.96 36	41.6	60.62	52.0
17	46.86	226 10	64.11	45.2	22.31 35	42.8	60.00	51.8
2.7	47 27 31	25.4	64.45 34	46.6	22.64 33	44.I	61.17	52.0
Okt. 7	47.85	27.5	64.77	48.1	22.05 31	45.4	6r 42 25	52.5
17	48.29	29.7	65.07	49.6	23.23	40.7	61.64	53.5
	38	24	26	15	25	12	10	12
Nov. 6	48.67	32.I ₂₆	65.33	51.1	23.48	48.0	61.83	54.7
Nov. 6	49.00 26	34.7 26	65.56 20	52.6 15	23.70 19	49.2	62.00	56.2
26	49.26 20	37.3 25	65.76	54.1	23.89	50.5 11	62.14 10 62.24	57.9 18
Dez. 6	49.46	39.8	65.91	55.5	24.04	51.6	62.30	59.7 18
	49.58	42.3	6	56.9	24.15	52.7	3	61.5
16	49.62 -	44.7	66.08	58.1 11	24.21	53.7	62.33	63.3
26	49.58	46.9	66.09	59.2	24.22	54.6	62.33	65.0
36	49.47	48.8	66.05	60.1	24.19	55.4	62.28	66.5
Mittl. Ort	42.51	18.1	60.67	33.7	18.97	30.0	58.17	79.6
			1.301	+0.832		_	- '	

8000	150) λ΄	Fauri.	151) v '	Tauri.	152) c	Persei.	154) of E	ridani.
1913	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	3 ^h 55 ^m	12" 14'	3 ^h 58 ^m	5° 44′	4 ^h 2 ^m	47° 28'	4 ^h 7 ^m	7° 3'
Jan. o	52.36	51.1	32.51	61.7	21.53 8	67.6	38.08	45.5 12
10	52.32	50.7	32.47 8	61.0 6	21.45	68.8	38.04 8	46.7 10
20	52.24 10	50.3	32.39	60.4 5	21.33	69.8	37.96 11	47.7 9
30	52.14	50.0	32.29	59.9 5	21.16	70.5	37.85	48.6
Febr. 9	52.01	49.6	32.16	59.4	20.95	70.9	37.72	49.2
19	51.86	49.3	32.01	59.1	20.72	70.9	27.57	49.6
März I	51.70	40.0	21.86	58.8	20.48	70.5 6	37.40 16	10.8
11	51.55	$48.7 \frac{3}{2}$	31.71	58.7	20.24	60.0	37.24 15	40.7
21	51.41	48.5	31.56	58.7	20.02	69.0 9	37.09 14	40.4
31	51.29	48.4	31.44	58.8	19.83	67.8	30.95	48.9 8
April 10	51.19	48.4	31.35	59.1	19.68	66.4	36.85	48 T
20	5T.T1 5	48.5	21.20	505	10.50	64.0	36.78	47.1
30	51.13	48.8	31.28	60 T	10.56	62 1	26.71 4	45.8 13
Mai 10	51.16	40.2	2121 3	60.0	TO.50	61.8	26.76	1112
20	51.25	49.8	31.38	61.9	19.69	60.4	36.81 5	42.7
20	23 14	50.6	23 13	12	19.87	14	36.92	20
Juni 9	51.39	51.6	31.51	63.1	20 10 43	59.0 n	15	38.7
Juni 9	51.56	52.6	31.88	64.4	20.38 28	57.9 9	37.26	36.7 20
29	51.77 52.02	53.8	22 12	67.3	20.71 33	57.0 6 56.4	37.48 22	34.7 20
Juli 9	52.29	55.1	32.38	68.8	21.08 37	56.0	37.73	32.7
	30	13	29	15	40	1	27	20
19	52.59 31	56.4 13	32.67	70.3	21.48	55.9 -2	38.00 29	30.7
29	52.90 31	57.7	32.97	71.8	21.91	50.1	38.29 30	29.0 10
Aug. 8	53.21	59.0 12	33.20	73.2	22.34	50.0	38.59 30	27.4
28	53.53 31	60.2	33.59 30	74.5 10	22.78	57.2	38.89 30	26.0
	53.84 31	61.3	33.89 30	75.5	23.22	58.1	39.19	25.0
Sept. 7	54.15 29	62.3 8	34.19	76.4 6	23.64	59.3 13	39.49 28	010
17	54.44 28	63.1 6	34.48	77.0	24.00	60.6	39.77 28	23.9
27	54.72	63.7	34.75	77.4	24.45	62.1	40.05 25	23.9
Okt. 7	54.97 24	04.1	35.00	77.6	24.82	63.7 16		24.2
17	55.21	64.3	35.24	77-5	25.1/	05.3	40.53	24.9
27	55.42	64.4 -	35.45	77.2	25.48	67.1	40.74 18	2- 8
Nov. 6	55.61 16	612	35.63	76.8	25.75	68.9	40.02	270
16	55.77	64.1	35.78	76.2	25.97	708	41.08	28.3
26	55.90	03.0	25.QI	75.5	26.15	72.6	41.20	20.8
Dez. 6	55.99	63.5	36.00	74.8	26.28	74.4	41.29	31.3
- 16	5	60 T	36.05	740	26.26	76 T	AT 24	22.8
26	-6.06	60 H 4	-6 4		26.27	77.7	41.35	34.3
36	56.04	62.3	36.07	72.5	26.33	79.0	41.33	35.6
-			-					
Mittl. Ort	51.48	42.8	31.60	54.8	20.41	52.1	37.07	49.7
sec 6, tg 6	1.023	+ 0.217	1.005	-1-0.101	1.479	+1.091	1.008	-0.12

	155) α H	orologii.	156) α Reticuli. 160) v ⁴ Eridani.			162)	δ Tauri.	
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	4 ^h 11 ^m	42° 29′	4 ^h 13 ^m	62° 40′	4 ^h 14 ^m	34° 0′	4 ^h 17 ^m	17° 20
Jan. o	8.68	92.6	20.91	92.9 24	37.47	37.5 21	55.90	3 30.7
IO	8.55	94.8	20.62	95.3 19	37.38	39.6	55.87	6 30.6
20	8.38	96.6	20.20	97.2	37.24 16	41.3		30.4
30 Falur a	8.17	98.0	19.85	98.6 8	37.08	42.7 9	55.71	30.2
Febr. 9	7.94 26	98.9	19.40	99.4	36.88	43.6	55.58	29.9
19	7.68	99.3 -	18.92 48	99.7	36.67	44.0 0	55.44	6 29.7
März 1	7.41 26	99.2 6	18.44	99.4	36.45	44.0	55.28	7 29.4 2
11	7.15	98.6	17.96 46	98.5	36.22 21	43.6		6 29.2
21	6.90	97.5 16	17.50	97.2	36.01	42.7	54.95	2 20.9
31	20	95.9	17.08	95.3	35.82	41.4	54.82	28.6
April 10	6.48	94.0	16.71	93.0 27	35.65	39.7 20	54.71	7 28.4
20	6.33	91.7 26	16.40	90.3	35.53	37·7 ₂₄	54.64	28.3
30	6.22	89.1	16.16	87.3	35.44	35·3 ₂₆	54.01	2 40.3
Mai 10	0.17	86.2	16.00	04.0	35.41	32.7 28	54.63	7 28.4 2
20	6.17	83.0	15.91	80.5	35.42	29.9	54.70	28.6
30	6.24	79.5	15.91	76.5 36	35.50 12	26.6	54.82	6 29.1
Juni 9	6.36	70.2	16.02	72.9	35.62	23.6 32	54.98	29.6
19	6.54 21	72.9	16.20 26	09.4	35.79	20.4 20	55.18	4 30.3 8
29	6.75	69.7	16.46	00.0	36.00	17.5 28	55.42	6 31.1
Juli 9	7.02	66.8	16.79 39	62.9	36.25	14.7	55.68	32.1
19	7.31	64.1	17.18	60.1	36.53	12.1	55.97	33.1
29	7.04 34	01.7	17.02	57.7	36.84	9.8 19	50.28	2 34.1
Aug. 8	7.98 36	59.8	18.09 51	55.9	37.16 33	7.9 15	50.00	35.2
18	8.34 36	58.4 8	18.60	54.6	37.49	6.4	50.92	30.2
28	8.70	57.6	19.12	53.8	37.82 33	5.5	57.24	37.2
Sept. 7	9.05	57.3	19.63	53.7 - 6	38.14 32	5.1 -	57.56	38.0 8
17	9.40 32	57.6	20.14	54.3	38.46	5.2 6	57.87	38.8
27	9.72	58.4	20.61	55.5	38.76 28	5.8 12	58.16	8 39.4 5
Okt. 7	10.02	59.8	21.04	57.2 23	39.04 26	7.0 16	58.44	6 39.9
17	10.29	61.7	21.41	59.5	39.30	8.6	58.70	4 40.2
27	10.52	64.1 26	21.72	62.2	39.52	10.7	58.04	40.5
Nov. 6	10.71	66.7	21.95 16	05.3	39.71	13.1 26	59.16	8 40.6
16	10.85	69.6	22.11	00.0	39.85	15.7	59.34	6 40.7
26	10.95	72.0	2.	74.0	39.96	18.4 28	59.50	40.6 I
Dez. 6	10.99	75.7	22.16	75.4 32	40.03	21.2	59.62	8 40.5
16	10.99 6	78.6	22.07	78.6	40.05	23.9 26	59.70	40.4
26	10.93	81.3	21.88 26	81.5	40.02 3	26.5	E0 74 -	40.2
36	10.83	83.8	21.62	84.2	39.95	28.7	59.73	40.1
Mittl. Ort	7.02	90.6	18.04	89.0	36.04	37.0	54.93	21.2
sed 8, tg 8		-0.916		— 1 .936	_	-0.675	1.048	+0.312

****	164) ε	Tauri.	168) α	Tauri.	169) v B	ridani.	171) α Do	radus.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
-, 1	4 ^h 23 ^m	18° 59'	4 ^h 30 ^m	16° 20′	4 ^h 31 ^m	3° 31′	4 ^h 32 ^m	55° 12
Jan. 0	33.07 33.05 6	27.6 1 27.5 1	56.62 56.61	15.9 15.6	59.33 ₂ 59.31 6	41,2 42.4	9.29 ₁₈ 9.11	89.5 92.1
20	22.00	27.4	56.56	15.4	50.25	43.4	8.86 25	94.2
30	22.80	27.2	56 47	15.2	EO TE	112	8.57	95.9
Febr. 9	32.77	27.1	56.34	15.0	59.02	44.9	8.24 33	97.0
19	32.62 16	26.9	56.20 16	14.8	58.88 16	45.4	7.88	97.6
März I	32.46	26.6	16.04	14.5	58.72	15.7	7.50 38	97.7
11	32.20	26.4	55 87 17	142	58.55	45.7	- TO 30	97.2
21	32.14	26.1	55.71	T4.T	ES 20	45.6	6.76	96.1
31	31.99	25.8 3	55.57	13.9	58.25	45.2	6.42 34	94.6
April 10	31.88	25.6	55.46	12.7	58.13	44.6	6.12	92.6
20	31.81	25 4	55.48	T26 -	58.04	43.8	5.86	90.2
30	31.77	25.2	55.34	T2.7	58.00	12.8	5.66	87.5
Mai 10	21 78	25.3	55.34	13.8	57.99	41.6	5.52	84.5
20	31.84	25.4	55.39	14.1	58.02	40.3	5.45	81.2
20	29 12	3	10	4	58.10	10	0	77 8 3
Juni 9	31.96 16	25.7 26.1	55·49 16		31 58.24	38.7 18	5.45 8	77.8
	32.12	26.7	° 55.65	15.1		36.9 18	5.53 14	73.9
19	32.32	1	55.84 22	15.8 8	58.41		5.67 20	70.4
Juli 9	32.55 27	27.4 8 28.2	56.06 26	16.6	., 22	33.3 18	5.87 27	67.0
Juli 9	32.82		56.32		58.85	31.5	6.14	63.8
19	33.11	29.1	56.60 30	18.5 10	59.11 28	29.7	6.46	61.0
29	33.42	30.I	56.90 31	19.5	59.39 20	28.0	0.02	58.4
Aug. 8	33.74	31.1	57.21 32	20.5	59.68	26.5	7.21	56.3
18	34.06	32.I	57·53 32	21.4	59.98	25.2	7.63 43	54.8
28	34-39	33.0	57.85	22.3	60.28	24.2	8.00	53.8
Sept. 7	24.71	33.8	58.17	23.I	60.58	22.5	8.49	53.4
17	35.02	34.5	58.48 31	23.8	60.87	22.1	8.0T 42	527
27	25.22	35.2	58.77	24.3	61.15	220 -	0 22 41	54.6
Okt. 7	25 61	35.7	50.06	217 4	61.42	222	9.70	56.1
17	35.87	36.I 4	59.33	25.0	61.67	23.8	10.04	58.1
	25	3	25	1	23	8	30	T
Nov. 6	36.12	36.4	59.58 22	25.1	61.90	24.6	10.34	60.6
16	36.34 20	36.6			62.10	25.6	10.58	63.5
		36.7	60.00	25.0	62.28	26.9	10.76	66.7
Dez. 6	36.70 12 36.82	36.7	60.16	24.8	62.43	28.2	10.87	70.0
	1 0	36.7		24.6		29.6	10.92 —	73.4
16	36.91	36.7	60.38	21 1	62.62	31.0	10.90	76.7
26	30.95	36.6	60.44	24.2	62.66	32.3	10.80	79.7
36	36.96	36.5	60.45	23.9	62.65	33.5	10.65	82.5
Mittl. Ort	32.07	17.8	55.60	6.6	58.26	46.8	6.99	87.7
sec δ, tg δ		+0.344		+0.293	1	•	1.753	, ,

	172) 53	Eridani.	174) τ	Tauri.	173) Gi	r. 848.	175) 4 C	amelop.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	4 ^h 34 ^m	14° 27'	4" 37"	22° 47′	4 ^h 37 ^m	75° 47′	4 ^h 40 ^m	56° 36′
Jan. o	12.87	81.0	2.35	37.4 ₁	10.00	22.0 26	46.72 6	28.9 18
10	12.83	82.6	2.34	37.5	9.75 40	24.6	46.66	30.7 16
20	12.76	84.0	2.29	37.6	9.35 54	26.9 18	46.54	32.3
30	12.65	85.2	2.20	37.6	8.81 65	28.7	46.35 24	33.0
Febr. 9	12.51	86.1	2.08	37.6	8.16	30.1	46.11	34.6
19	12.35	86.6	1.93	37-5 2	7.43	30.9	45.83 31	35.I I
März 1	12.18	00.9	1.76	37·3 ₃	0.00	31.2	45.52 32	35.2
11	12.00	86.8	1.59 17	37.0 3	5.88 74	31.0 8	45.20 30	34.9 6
21	11.83 16	86.5 7	1.42	36.7	5.14 69	30.2 28.8 14	44.90 ₂₈ 44.62	34.3
31	11.67	85.8	1.27	36.4	4.45	17	23	33.2
April 10	11.54 10	84.9 12	1.15	36.0	3.86	27.I ₂₁	44.39 17	31.9 16
20	11.44 6	83.7	1.06	35.7 3	3.4I 32	25.0	44.22	30.3 18
30 M.: 50	11.38	82.2	1.01 _	35.4 2	3.09	22.6	44.11	28.5 19
Mai 10	11.36 2 11.38	78.6	1.02	35.2	2.94 -	17.3	44.08 4	24.7
	7	21	10	35.1	18	26	12	18
30	11.45	76.5	1.16	35.1 ₂	13.13 38	14.7 28	344.24 22	22.9 20
Juni 9	11.58 16	74.I	1.32 19	35.3	3.51 4.02 6	11.9 24	44.46 28	20.9 16 19.3
19	11.74 19	71.8	1.51 23 1.74 26	35.6 4 36.0 6	1 60	9.5 ₂₂ 7.3 ₁₈	44.74 34 45.08 30	18.0
Juli 9	11.93 12.16	67.2	2.00	36.6	5.45	5.5	45.47	16.9
	25	21	29	6	88	15	44	9
19	12.41 28	65.I	2.29 31	37.2 8	6.33 96	4.0	45.91 47	16.0
Aug. 8	12.69 29	63.I 61.4	2.60 32 2.92	38.0 7	7.29 103 8.32 108	2.9 7	46.38 51	15.5
11 18	12.98 30 13.28	60.0	3.25 33	39.5 8	0.40	1.9 -3	47.41	15.2
28	13.58 30	58.9	3.58 33	10.3	10.50	2.0	47.93	15.5
1	30	6	33	- 8	11.60	5	53	16.1
Sept. 7	13.88 29	$\frac{58.3}{58.0} = \frac{3}{4}$	3.91	41.1 7	12.69	2.5	48.46 48.98 52	17.0
17 27	14.17 ₂₈	58.1	4.55	42.4	13.75	3.4 13	40 40	18.1
Okt. 7	T4 72	58.6	4.85	42.0	14.76	6.4	40	10.4
17	14.98	59.6	5.14	43.4	15.71	8.4	50.43	21.0
Ĺ	23	60.9	26	43.8	86	10.8	42	22.7
Nov. 6	15.21 ₂₀	62 5 16	5.40	44.1 3	177.00	TO 4	5T 22 30	24.6
16	15.41 17	64.3	5.86	44.3	17.97	16.2	ET 56 33	26.7
26	T5 772	66.2	6.04	44.6	т8.46	TO.2	ET 84	28.8 21
Dez. 6	15.83	68.2	6.18	44.8	18.80 34	22.2	52.05	30.9
16	15.90	70.2	6.28	44.0	18.98	25.2	52.19	33.I 21
2 6	TE 02 3	72 1	6.24	45.T	T8 00 -	28.T	52 26 -	25.2
36	15.91	73.9	6.35	45.2	18.83	30.8 27	52.25	37.1
Mittl. Ort	11.71	84.7	1.29	27.0	6.27	4.8	45.02	13.6
sec o, tg o	1.033	-0.258		+0.420		+3.948	1.817	+1.517

	178) 9 C	amelop.	180) π ⁵	Orionis.	181) (A)	ırigae.	182) 10 C	amelop.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	4 ^h 45 ^m	66° 11′	4 ^h 49 ^m	2° 17′	4 ^h 51 ^m	33° 1′	4 ^h 55 ^m	60° 18'
Jan. ∘	25.87 10	62.7	44.20	62.9	20.75	57.0	42.41	73.7
10	25.77	65.0 20	44.20 5	62.0	20.76 -	57.7 6	42.37	75.7
20	25.58 28	67.0	44.15	61.1 7	20.71	58.3	42.25	77.6
30	25.30 35	68.7	44.07	60.4 6	20.61	58.7	42.05 26	79.2
Febr. 9	24.95	69.9	43.96	59.8	20.48	59.0 2	41.79	80.3
19	24.55	70.7	43.82	59.4	20.32	59.2 o	41.48	81.1
März 1	24.11	71.0	43.66	59.1	20.14 20	59.2 2	41.14 36	01.4
11	23.65	70.8	43.50 16	59.0	19.94 18	59.0	40.78	81.3
21	23.22	70.1	43.34	59.0	19.76	58.0	40.43	80.8
31	22.82	68.9	43.19	59.2	19.58	58.1 6	40.11	79.8
April 10	22.47 26	67.4 18	43.06	59.6	19.43	57.5	39.83	78.5
20	22.21 18	65.6	42.06	60.1 5	19.32 6	56.8 7	39.60	77.0
30	22.03 8	63.6	42.91 5	60.7	19.26	56.0	39.45	75.1
Mai 10	21.95	61.3 23	$42.89 - \frac{2}{2}$	61.6	19.24	55.3 7	39.38 -	73.1 2
20	21.97	59.0	42.91	62.6	19.28	54.6	39.40	71.1
30	22.09 26	56.7	42.98	63.8	19.37	54.0 6	20.50	60.T
Juni 9	"22.35	54.3 20	43.11 16	65.2	5 10.52	53.4	30.7I	66.9
19	22.68 33	52.3	43.27	66.6	10.72	53.I	39.98	65.T
29	23.10	50.4 15	43.46	68.1	19.96	52.8	40.32	63.4
Juli 9	23.60 50	48.9	43.69 25	69.6	20.23	52.8	40.73	62.0
19	24-16 61	47.6	43.94 27	71.1	20.53	52.9 2	41.19 50	60.9
29	24.77 65	46.7 6	44.21 29	72.5	20.86 33	53.1 4	41.69 54	60.0
Aug. 8	25.42 68	46.1	44.50 29	73.8	21.21 35	53.5 4	42.23 56	59.4
18	26.10	45.9 -	44.79 30	75.0 9	21.56 37	53.9 5	42.79 58	59.2
28	20.80	46.0	45.09	75.9	21.93 36	54.4	43.37 58	59.2
Sept. 7	27.49 no	46.4	45.40	76.6	22.20	55.0	12.05	59.5
17	28.TO	17.2	15.60	77.1	22.65	55.7 7	14.50	60.2
27	28.86	18.2	15 08 "	77.3	23.00 35	56.4	45.00	61.2
Okt. 7	29.51 6 ₁	40.8	46.26	77.2	22.22 33	57.1 7	45.64	62.4
17	30.12	51.5	46.53	76.8	23.66	57.8	46.16	63.8
27	30.69	20	46.77	76.2	30	7	166- 49	_
Nov. 6	31.20	53.5 55.8 23	- 4	. 0	23.96 24.23	58.5 8	46.65	65.5 67.4
16	31.63 43	58.2 24	47.00 20	75.4 9		59·3 7 60.0 7	47.09 38	60.5
2 6	31.98 35	60 7 -3	47.20	74.5	1 24 00	60.8	47.47 32	777
Dez. 6	32.25	63.3	47·37 ₁₃ 47·50	73.4 11 72.3	24.87	61.5	47.79 26	71.7
	17	20	10	11	12	0	18	
16	32.42	65.9 26	47.60 6		2 4.99 8	62.3 8	48.23	76.3
26	4	23	47.66	70.1	25.07	63.1	48.32	78.5
36	32.45	70.8	47.68	69.1	25.10	63.8 7	48.33	80.7
Mittl. Ort	23.51	46.7	43.11	56.0	19.55	45.3	40.40	58.8
sec δ, tg δ	2.478	+1.267	1.001	+0.040	1.193	+0.650	2.019	+1.75

	183) E A	urigae.	184) t	Fauri.	185) η A	urigae.	186) E L	eporis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1 1	4 ^h 55 ^m	43° 41′	4 ^h 57 ^m	21° 27′	5 ^h 0 ^m	41° 7′	5 ^h 1 ^m	22° 28′
Jan. o	44.77 。	56.9 12	54.78	69.4	26.05	16.5	47.98	70.6
10	44.77 6	58.1	54.80	69.5	$26.06 - \frac{1}{6}$	17.6	47.96	72.7
20	44.71	59.2	54.76	69.5	26.00 ro	18.6	47.89 11	74.5
30	44.60	60.2	54.68	69.5	25.90	19.5 6	47.78	76.1 11
Febr. 9	44.44	60.9	54-57	69.5	25.76	20.I	47.64	77.2
19	44.25	61.3	54.43 16	69.4 r	25.57 20	20.5	47.47	78.1
März 1	44.03	61.4	54.27	69.3 2	25.37 22	20.6	47.28	78.5
11	43.80 23	61.2	54.10	69.1	25.15 22	20.5	47.09 20	78.6
21	43.57 20	00.8	53.92	68.9	24.93 20	20.I 6	46.89	78.3 6
31	43.37	60.1	53.77	68.7 2	24.73	19.5	46.71	77.7
April 10	43.19	59.2	53.64 11	68.5	24.56	18.7	46.55	76.7
20	43.05 8	58.2	53.53 6	68.2 3	24.43 8	17.7	46.41	75.4 17
30	42.07	57.0 13	53.47 2	68.0 °	24.35	16.7	46.32 6	73.7
Mai 10	$42.94 - \frac{3}{1}$	55.7 12	53.45 -	67.9	$24.32 \frac{3}{2}$	15.5	46.26	71.8
20	42.97	54.5	53.48 8	67.8	24.34	14.4	46.25 —	69.6
30	43.06	52.2	53.56	67.8	24.42	12.2	46.28	67.2
Juni 9	6/12.22	52.0	53.60	68.0	21.58	12.2	1/16.37	646
19	43.44 26	51.0 8	53.86	68.3	24.78	11.4	46.50 16	62.0 26
29	43.70	50.2 6	54.07	68.7 4	25.03 25	10.7 6	16 66	50.4
Juli 9	44.00	49.6	54.31 28	69.2 6	25.32	10.1	46.87	56.9
19	44.34	49.1	54.50	69.8 6	25.64	9.8	47.10	54.5
29	44.71 3/	18.0	54.88	70.4	25.00 35	0.6	17 26	52.2
Aug. 8	45.10 39	18.0	55.10	71.1 7	26 27 30	0.6	17.64	50.4
18	15.50	40.0	55.51	71.8	26.75	0.7	47.03	18.8
28	45.91	49.3	55.84 33	72.5	27.15	10.0	48.23	47.6
Sept. 7	42	40.8	56.16	5	40	5	48.54	46.9
	46.33 41	49.8 6	56.49 33	73.0 6	27.55 40	10.5	48.85	46.6
17 27	46.74 40	50.4 8	56.81 32	73.6	27.95 38 28.33 38	11.0 7	20	46.8
Okt. 7	39	52.1	57 12 31	744	2871		49.14 29	
17	47.53 37		57.42 30	74.4 3	29.08 37	13.4	49.43 27	47.5
The state of the s	47.90	53.1	27	2	34	10	49.70 26	16
27	48.25	54.2	57.69 26		29.42	14.4 10	49.96	50.2
Nov. 6	48.57	55.4	57.95 23	75.0 ₁	29.73 28	15.4 12	50.18	52.1
16	48.86	56.7	58.18	75.I o	30.01	16.6	50.38 16	54.3
26	49.10	58.1	58.38 16		30.25	17.7	50.54	56.6
Dez. 6	49.30	59.5	58.54	75.1	30.45	19.0	50.67	59.1
16	49.45	60.9	58.66	75.2	30.60	20.2	50.76	61.6
26	49.54	62.2	50.75	77.0	30.69	21.4	50.80	64.0
36	49.56	63.5	58.78	75.2	30.73	22.6	50.80	66.2
Mittl. Ort	43.38	43.9	53.65	59.6	24.68	4.0	46.67	74.2
sec 3, tg 3	1.383	+0.956	1	+0.393		+0.873		-0.41
, -0	1 - 5-3		/		1 - 3-7	/ 3		

-	188) β I	Cridani.	192) µ A	Anrigae.	191) 19 H.	Camelon.	193) α A	urigae.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	5 ^h 3 ^m	5° 11'	5 ^h 7 ^m	38° 22'	5" 8"	79° 7′	5 ^h 10 ^m	45° 54′
Jan. o	35.49	47.6	29.72	68.4	17.35	76.3	17.11	50.6
10	35.40	10.0	29.74	60.4	17.15	70 2	17.13	52.0
20	35.44 8	50.2	29.70	70.3	16.73 62	81.8 26	17.08	53.3
30	35.36	51.2 8	29.61	71.0 6	16.11 79	84.0	16.97	54.4 8
Febr. 9	35.25	52.0	29.48	71.6	15.32	85.8	16.82	55.2
19	35.11 16	52.6	29.31	72.0 2	14.41	87.1	16.62	55.8
März 1	34.95	52.9 2	29.11	72.2	13.42	87.9	16.40	56.1 3
11 21	34.78	53.1 -	28.90 21 28.69	72.1 71.8 3	12.38	88.0 4 87.6 4	16.16	56.0
31	34.61 34.45	53.0 52.7	28.50	71.3	11.36	86.6	15.92	55.7 6 55.1
	13	5	17	7	87	14	19	9
April 10	34.32 11 34.21 8	52.2 8	28.33 28.20	70.6	9.52 8.80 72	85.2 19	15.50	54.2
30	34.13	50.4	28.11	68.8	8.24 56	ST T	15.35 11	53.2 51.9
Mai 10	24.10	40.3	28.08 -3	67.8	787 3/	78.5	15.10	50.6
20	34.10	47.9	28.10	66.9	7.71	75.8 -	15.20	49.2
30	34.16	16.4	28.17	66.0	7. 7.	72 T	15.28	47.9
Juni 9	34.26	146	828 22 15	60 T 9	8.06	70.3	T5 4T 13	46.6
19	34.40	42.8 18	28.50	64.3 6	9 8.60 54 68	67.4	915.63	45.3
29	34.57	41.0 18	28.73 28	63.7	9.28 86	64.9 23	15.88	44.2 8
Juli 9	34.78	39.2	29.01	63.2 5	10.14	62.6	16.17	43.4
19	35.02 26	37.4 16	29.32	62.9	11.15	60.7	16.51 34	12.7
29	35.28 27	35.8	29.65 33	62.8	12.29	59.0 17	16.88 37	42.2 5
Aug. 8	35.55 20	34.3	30.01	62.8	13.54	57.8	17.27	41.9
18	35.84 30	33.0	30.30 38	62.9	14.88	57.0	17.69	41.8
28	36.14	32.0	30.76	63.2	16.27	56.5	18.11	41.9
Sept. 7	36.43 30	31.3	31.14 39	63.6	17.69	56.5	18.54	42.2
17	36.73	30.9	31.53 38	04.0	19.12	50.9	18.96	42.0
Okt. 7	37.02 28	30.9	31.91 36	64.6	20.54 ₁₃₈ 21.92	57.8 12 59.0	19.39 41	43.2 8
Okt. 7	37·3° ₂₇ 37·57	31.2 6 31.8	32.27 ₃₆ 32.63	66.0	23.22	60.7	20.19	44.0 8
	25	10	33	8	121	20	38	11
Nov. 6	37.82 38.05 ²³	32.8	32.96	66.8	24.43	62.7 65.0 23	20.57 35 20.92 31	45.9 12
16	38.26	34.0 35·3	33.27 ₂₈ 33.55 ₂₄	68.6	25.53 94 26.47 76	67.7	21.23	47.1 48.4
26	28.12	268	22.70	60.6	07.00	706	21.23 27 21.50 27	40.7
Dez. 6	38.58	38.4	34.00	70.6	27.81	73.6	21.72	51.2
16	38.68	40.0	24 15	71.7	28.18	76.6	21.00	52.7
26	28.75	41.6	24.25	72.7	28.31	70.7	22.01	54.2
36	38.77	43.0	34.30	73.7	28.21	82.7	22.06	55.6
Mittl. Ort	34-33	53.6	28.37	56.6	11.68	60.9	15.58	38.0
sec δ, tg δ	1.004	-0.091	1.276	+0.792	5.305	+5.210	1.437	+1.032

	194) β (rionis.	196) 🛭 D	oradus.	201) γ (rionis.	202) β7	l'auri.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	5 ^h 10 ^m	8° 17'	5 ^h 13 ^m	67° 16′	5 ^h 20 ^m	6° 16′	5 ^h 20 ^m	28° 32′
Jan. o	22.55	59.6	52.83 26	58.5 30	29.or 3	25.3	48.74	15.8
10	22.55	61.1	52.57 37	61.5 26	$29.04 \frac{3}{2}$	24.4	$48.78 - \frac{4}{2}$	16.2
20	22.52 8	62.4	52.20	64.1	29.02 6	23.7 6	48.76	16.7
30	22.44	63.6	51.70	66.3	28.96	23.1	48.09	17.0
Febr. 9	22.32	64.5	51.25	68.0	28.86	22.6	48.59	17.3
19	22.18	65.2	50.69	69.1 6	28.73	22.2	48.45	17.5
März 1	22.02	05.0	50.10 61	69.7	28.58	22.0	48.28	17.6
11	21.85	65.8	49.49 61	69.8	28.41	21.8	48.09 18	17.6
21	21.67 16	65.7	48.88	69.3	28.25	21.8	47.91	17.4
31	21.51	65.3	48.30	68.3	28.09	21.8	47.74	17.1
April 10	21.37	64.7 8	47.75	66.7	27.05	22.0	47.58	16.8
20	21.25 8	63.0	47.26	64.7	27.84 8	22.4	47.46 8	16.3
30	21.17	62.8	46.83	62.3	27.76	22.8 4	47.38	16.9
Mai 10	21.12	61.5	46.49 34	50.6	27.72	23.4 8	47.33 -	15.4
20	21.13	60.0	46.23	56.5	27.72	24.2	47.34	14.9
30	21.17	58.4	46.06	53.2	27.77	25.0	47.40	14.5
Juni 9	21.17 8	56.6	45.99 -7	49.8 34	27.86 9	26.0	47.50	14.2
19	921.39	54.6	1046.03	45.9 39	1228.00 14	27.2	12/7.67	T2.0
29	21.56	52.6	46.17	42.4 33	28.17	28.4	47.87	12.8
Juli 9	21.76	50.6	46.40	39.1	28.38	29.5	48.11	13.8
	23	48.7	32	31	28.61	12	27	I
19	21.99 25	17	46.72	36.0 28	28.87	30.7	48.38 29	13.9
Aug. 8	22.24 27	47.0 16	47.12 46	33.2	27	31.9		14.1
18	22.51 29	45.4	47.58	30.8 19	29.14		48.99 33	14.3
28	23.10	44.1	48.66 56	14	29.43 30	33.9 8	49.32 34 49.66 34	14.6
	23.10	43.0	59	27.5	29.73	34.7	34	
Sept. 7	23.39 30	42.3	49.25 60	26.8	30.03 30	35.3	50.00 35	15.3
17	23.69 29	41.9	49.85	26.7 -	30.33	35.7	50.35 35	15.7
27	23.98 28	41.9	50.44 56	27.2	30.63	35.9	50.70 33	16.0
Okt. 7	24.26	42.3 8	51.00 52	28.3 18	30.93 28	35.8	51.03 33	10.3
17	24.53	43.1	51.52	30.1	31.21	35.5	51.36	10.0
27	24.70	44.I	51.99 20	32.5	31.48	34.9	51.67 29	17.0
Nov. 6	25.02 21	45.4 16	52.38 39	35.3	31.73	34.2	51.96 26	17.3
16	25.23 18	47.0	52.68	38.4	31.96	33.3	52.22	17.6
26	25.41	48.7	52.89	4 T Q 34	32.16	22.4	52.40	17.9
Dez. 6	25.50	50.5	52.99	45.4	32.33	31.4	52.66	18.3
16	25.67	52.3	52.99	48.0	32.47	30.4	52.81	18.7
26	25.74	54.0	52.87	52.4 33	32.56	20.4	52.02	TO T
3 6	25.76	55.7	52.66	55.6 32	32.61	28.6	52.98	19.5
Mittl, Ort	21.36	65.3	49.26	59.5	27.85	17.6	47.47	5.6
seco, tgo		-0.146		-2.388		+0.110		+0.54

1	203) 17 (lamelop.	206) ð (Prionis.	205) G	r. 966.	207) α J	eporis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1 2	5 ^h 21 ^m	62° 59′	5 ^h 27 ^m	0° 21′	5 ^h 28 ^m	74° 59′	5 ^h 28 ^m	17" 52'
Jan. o	59.39	58.6	34.85	39.3	9.44 5	31.0 28	54.85	57.I 20
10	59.39 10	60.9 21	$34.88 \frac{3}{2}$	40.4	9.39	33.8 26	54.85	59.1
20	59.29 18	63.0	34.86	41.5 9	9.18	36.4	54.81 8	60.9 16
30	59.11 26	64.8	34.80	42.4 8	8.81	38.7	54.73	62.5
Febr. 9	58.85	66.3	34.70	43.2	8.31	40.6	54.62	63.8
19	58.53	67.4	34.58	43.7	7.70 69	120	54.47 18	64.7 6
März 1	58.16 37	08.1	34.43	44.I 2	7.0I 73	43.0	54.29 18	65.3
11	57.77	00.3	34.26	44.3 o	0.28	43.4	54.11	05.0
21	57.38	68.1	34.09 16	44.3 2	5·55 ₇₀	43.2	53.92 18	65.6
31	57.00	67.4	33.93	44.I 3	4.85	42.5	53.74	65.2
April 10	56.67 28	66.3	33.78	43.8 6	4.20 55	41.3	53.57	64.4
20	56.39	64.9	33.66	43.2	3.65	39.8 21	53.43	63.4
30	56.18	63.2	33.58	42.5 8	3.21 30	27.7	53.32 7	62.1
Mai 10	56.05	61.2	33.53	41.7	2.91	35.4 25	53.25	60.5
20	56.00 = 5	59.1	33.52	40.6	2.76	32.9	53.22 =	58.7
30	56.05	57.0 22	33.56	39.4	2.76	20.2	53.24 6	56.7 22
Juni 9	56.20 26	54.8 23	33.63	38.1 16	2.92	27.6 28	53.30 11	54.5
19	56.46	52.5 20	33.76	36.5	13 3.27 35 46	24.8	53.41	52.0 24
29	50.77	50.5	33.92	35.0	3.73 60	22.3 23	53.55	49.6
Juli 9	57.16	48.8	34.12	33.5	4.33	20.0	53.73	47.3
19	57.62	17.2	34.34	32.0	5.04 81	18.0 18	53.04	45.T
29	58.13 56	46.0 10	34.58	30.6	5.85 %	16.2	54.18 26	43.0
Aug. 8	50.00	45.0 7	34.85 27	29.3	6.75	14.8	54.44 28	41.1
18	59.28 59	44.3	35.13 29	28.2	7.72 101	13.8 7	54.72 29	39.0
28	59.89 62	43.9	35.42	27.3	8.73	13.1	55.01	38.4
Sept. 7	6	43.8	35.72	26.6	9.78	$12.8 - \frac{3}{}$	55.31	37.5
17	61.14 63	44.I ³	36.02	26.3	TO 85	12.9	55.61	37.T
27	61.77 62	44.7 8	36.31	26.2	11.92	13.4 8	55.QT	27.2
Okt. 7	62.39 59	45.5 12	36.60 29	26.5 3	12.96	14.2	56.20 28	37.7 5
17	02.98	46.7	36.88	27.0	13.97	15.5	56.48	38.7
27	63.54	48.1	37.15	27.8	14.91	17.2	56.75	40.I
Nov. 6	64.06	40.0	37.40	28.8	TE 70	TO.2	5700	41.8
16	64.53 4/	51.8	27.62 23	30.0	16 56 11	21.5	57.22	43.8
26	64.03	53.0	37.83 ₁₈	21 2	T7 2.T	24.0 28	57.41 16	46.0
Dez. 6	65.25	56.2	38.01	32.7	17.73	26.8	57.57	48.3
16	65 40	E8 E 23	28.14	24.2	18 TO 37	29.7	rn 60	507
26	60 64 13	600	28 22	25 5	-0 22	226	57.77	53.0 -3
36	65.70	63.2 23	38.28	36.8	18.35	35·4 ₂₈	57.80 3	55.1
Mittl. Ort	56.93	45.2	33.67	46.I	5.00	17.3	53.55	62.2
secδ, tgδ		+1.962		-0.006		+3.729		0.323

	209) i (rionis.	210) ε (Orionis.	211) (Fauri.	212) B D	oradus.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	5" 31"	5° 57′	5 ^h 31 ^m	1 15'	5 ^h 32 ^m	21° 5′	5 ^h 32 ^m	62° 32'
Jan. o	11.83	52.5	49.09	17.6	27.91	34.2	55.06	44.9
10	11.85	54.0	49.12 = 3	18.8	27.96	34.2	54.89 25	48.1 32
20	11.83 6	55.3 12	49.10	19.9	27.95	34.3 0	54.04	50.9 24
30	11.77	56.5	49.05	20.9 8	27.90	34·3 ₁	54.31 33	53.3 20
Febr. 9	11.67	57.4	48.96	21.7	27.81	34.4	53.92	55.3
19	11.54 16	58.1 ⁷	48.83	22.3	27.68	34.4 0	53.48	56.8
März 1	11.38	58.6	18 67	22.7	27.53	34.4	FOOT TI	57.7
11	11.21	58.8	48.51	22.9	27 26	34.4	52.51	158.0 -
21	11.04	58.8	48.34 16	22.0	27.18 18 27.18 16	34·3 _I	52.01	57.9 8
31	10.88	58.6	48.18	22.7	27.02	34.2	51.52 49	57.I
April 10	10 70	58.1	48.03	22.3	26.87	4	51.06	12
20	10.73	/	47.91	21.8 5	26.75	34.0	TO 6 4 42	55.9 17
	TOST 9	57.4 9	47.82	21.1	26.66 9	33.9 2	50.28 36	54.2 22
Mai 10	10.45		47 77 3	20.2	26.61	33.7 ₁	49.98 30	52.0 25
20	10.43	55.4 54.1	47.77 2	19.1	26.61	33.6	49.74	49.5 29
	3	15	3	12	4	0	15	31
30	10.46	52.6	47.78	17.9 14	26.65	33.6 _I	49.59 7	43.5 33
Juni 9	10.53	51.0 18	47.85	16.5 16	26.74 15	33.7 2	49.52 7	40.2 28
19	10.65	49.2	47.98	14.9	26.89	33.9 2	49.53 10	30.4 35
T 1: 29	10.80	47.4 18	48.13 19	13.4 16	27.06	34.1	49.63 18	32.9 33
Juli 9	10.99	45.6	48.32	11.8	27.28	34.5	49.81	29.6 32
19	11.20	43.9 17	48.54	10.3	27.52 27	34.9	50.07 32	26.4 29
29	11.44 26	42.2	48.78 26	8.9	27.79	35.3 5	50.39 38	23.5 26
Aug. 8	11.70 27	40.8	49.04 28	7.6	28.08	35.8	50.77	20.9 21
18	11.97 29	39.5	49.32 29	6.4	28.39 31	36.2	51.21 44	18.8
28	12.26	38.5	49.61	5.5 6	28.70	36.7	51.68 47	17.2
Sept. 7	12.55	37.8	49.91	4.9	29.03	37.0	52.17	16.3
17	12.85	37.4	50.20	1.5	20.35	27 2 3	52.68	15.0
27	12.15	37.4	50.50	4.4	20.68 33	275	52.20 34	16.2
Okt. 7	TO 44	37.7	50.70	$4.7 \frac{3}{6}$	30.00	27.6	53.60	TT T 9
17	13.72	38.4	51.08	5.3	30.31	37.6	54.16 47	18.7
	27	10	27	6.1	30	0	43	22
Nov. 6	13.99 25	39.4	51.35 51.60	II	30.61 ₂₈ 30.89 36	37.6	54.59 38	20.9 26
16	14.24 23	40.7		7.2	- 20	37.4	54.97 31	23.5 26.6 31
26	14.47 20	42.2 16	51.83 21	8.5	31.15	37.3 2	55.28 23	24
Dez. 6	14.67	43.8	52.04 52.21	9.0 15	31.38 20	37.I I	55.51 15	30.0 35
	13	45.5	54.21	11.3	31.58	37.0	0	33.5 36
16	14.97 9	47.2 18	52.35 ₉	12.8	31.74	36.9	55.72 3	37.1
26	15.00	49.0 16	52.44 6	14.2	31.86	36.8	55.09 13	40.0
36	15.11	50.6	52.50	15.5	31.93	36.8	55.56	43.9
Mittl Ort	10.62	58.9	47.89	24.4	26.67	25.1	52.11	47.6
sec 8, tg 8	1.005	-0.104	1.000	-0.022	1.072	+0.386	2.169	-1.924

	215) α Co	lumbae.	216) o A	urigae.	219) LI	eporis.	220) x (rionis.
1913	AR.	Dekl.	AR.	Dekl.	AR	Dekl.	AR.	Dekl.
	5 ^h 36 ^m	34° 6′	5 ^h 39 ^m	49° 47′	5 ^h 43 ^m	14" 50'	5" 43"	9" 41'
Jan. o	31.41	67.8	11.38	32.9 16	2.05	67.5 20	39.04	53.2
10	31.40	70.5 25	11.43	34.5 16	2.08	69.5 18	39.0/	54.9 16
20	31.33	73.0 21	11.41	36.1	2.06	71.3	39.06 6	56.5
30	31.21 16	75.I 17	11.32	37.5	1.99 10	72.8	39.00 10	57.0
Febr. 9	31.05	76.8	11.18	38.7	1.89	74.1	38.90	58.9
19	30.86	78.1 g	10.99	39.6 7	1.75 16	75.1 6	38.77	59.8 6
März 1	30.64 23	78.9	10.76	40.3	1.59 18	75.7	38.62	60.4
11	30.41	79.3	10.50 26	40.5	1.41	76.I	38.45	60.7
21	30.17	79.3	10.24 26	40.5	1.22	76.1	38.27	60.7
31	2 9.94	78.8	9.98	40.I	1.04	75.8	38.10	60.5
April 10	29.73	77.9 14	9.75	39.4	0.88	75.3	37.94	60.0
20	29.54 16	76.5	9.56	38.5	0.73	74.4	37.80 10	59·3 10
30	29.38	74.8	9.41	37.3	0.62	73.2	37.70	58.3
Mai 10	29.27 6	72.8	9.31	35.9	0.55	71.8 16	37.03	57.1
20	29.21	70.4	9.28	34.4	0.51	70.2	37.60	55.7
30	20.10	67.9 28	9.32	32.9	0.52	68.4	37.61	EAT.
Juni 9	20.21	65.1	9.42	31.3 16	0.57	66.4	27.66	52.2
19	1529.29	61.9_{29}^{32}	9.60	29.7	17 0.67	64.1 23	37.77	50.3
29	29.41	59.0	9.82 28	28.3	0.80 17	61.9 22	37.91	48.4 20
Juli 9	29.58	56.1 28	10.10	27.I	0.97	59.7	38.08	46.4
19	29.78	522	10.43	26.0	1.17	57.6	38.28	44.6
29	30.02	50.7	10.70	25.0	1.40 23	55 7 19	38.51 23	128
Aug. 8	30.20	18.5	11.10	24.3 7	T.65 25	53.0	28.76 25	41.2
18	30.58	46.6	11.61 42	23.7	1.92 28	52.4	39.03 28	208 "
28	30.89	45.1	12.05 44	23.4	2.20	51.2	39.31	38.7
Sept. 7	31.21	44.2	12.50	23.3	2.49	50.4	39.60	38.0
2 op 11 7	31.54 33	43.8 -	12.06 40	22.4	2.70	50.1	39.90 30	27.6
27	31.86 32	43.9	13.42	23.6	3.00	50.1	40.20	37.6
Okt. 7	32.18 32	44.6	13.87 45	24.1 6	3.38	50.5	40.40	38.0
17	32.49	45.8	14.32 45	24.7	3.67	51.4	40.78 29	38.8
27	32.78	47.6	14.74	25.6	2.05	526	47.05	20.0
Nov. 6	33.05	49.8 22	15.14	26.6	3.95 ₂₆ 4.21	54.2	41.31	1T 1
16	33.29	52.2	15.51 37	27.8	4.44 20	56.1	41.55	43.0
26	22 18 19	55.I	TE 84 33	20.2	16.	58.2	4 T M6	44.0
Dez. 6	33.64	58.1	16.11	30.7	4.82	60.4	41.94	46.8
16	22 75	61.2	16.00	22.2	14	62.6	14	48.8
2 6	33.75 6 33.81	64 - 29	16.33 16	32.3 16	4.96	64.8	42.08	50.7
36	33.82	67.0	16.58	33.9 ₁₆ 35.5	5.08 3	66.9	42.23	52.6
			20.50	1000		55.9	44.45	
Mittl. Ort	29.86	7 2. I	9.57	21.5	0.78	73.4	37.80	59.5
sec 8, tg 8	1.208	-0.678	1.549	+1.183	1.035	-0.265	1.014	-0.171

	224) α	()rionis.	225) 8 A	Aurigae.	227) B	Aurigae.	228) 8 A	urigae.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	5 ^h 50 ^m	7° 23'	5 ^h 52 ^m	54° 16′	5 ^h 53 ^m	44° 56′	5 ^h 53 ^m	37° 12′
Jan. o	28.90	37.6	23.89 ₇	56.1	10.53 8	32.9 14	48.84	36.5 10
10	28.95	36.8	23.96	58.0	10.61	34.3	48.91	37.5
20	28.96	36.1 6	23.95 8	59.8	10.61	35.6	48.92	38.4
30	28.92	35.5 5	23.87	61.4	10.56	36.9 10	48.88	39.3
Febr. 9	28.85	35.0	23.72	62.9	10.44	37.9	48.78	40.0
19	28.73	34.6	23.51 26	64.0	10.28	38.8	48.64	40.7
März 1	28.59 ,6	34.4	23.25 28	64.9	10.08	39.5	48.47 20	41.1 4
II	28.43	34.2	22.97	65.3	9.86	39.8 r	48.27	41.4
21	28.26	34.2	22.67 28	65.4	9.62	39.9 2	48.06	41.4
31	28.10	34.2	22.39	65.1	9.39	39.7	47.86	41.3
April 10	27.95	34.4	22.12	64.5	9.17 18	39.2 7	47.68 16	40.9
20	27.82	34.7	21.88	63.5	8.99	38.5 10	47.52	40.4 7
30	27.72	35.1 4	21.70	62.3	8.85	37.5	47.40 8	39.7 g
Mai 10	27.66	35.0 6	21.58 6	60.8	8.70	36.4	47.32	38.9
20	27.64	36.2	21.52	59.2	8.72	35.2	47.29	38.1
30	27.66	36.9	21.53 8	57.4	8.74	33.9 12	47.32 7	37.2
Juni 9	27.72	37.7	21.61	55.7 18	8.81 7	32.7	47.39	36.3 8
19	27.83	38.6	21.70	53.9 10	8.95	31.4	47.52	35.5 8
29	¹⁹ 27.99 18	39.7 10	19 22.00 28	52.0	9.16	30.1	47.71 22	34.7
Juli 9	28.17	40.7	22.28	50.5	9.40	29.0	47.93 26	34.0
19	28.38	41.8	22.62	49.1	9.69	28.0	48 10	22.1
29	28.61	12.8	23.00	47.8	10.02 33	27.2	48.49 30	32.0
Aug. 8	28.87 28	43.7 8	23.42	46.8	10.37 35	26.5 6	48.81	32.6 3
18	29.15	44.5	23.87 45	45.9 6	10.75	25.9	49.15 34	32.3 2
28	29.44	45.2	24.34	45.3	11.15	25.0	49.51	32.1
Sept. 7	29.73	45.6	24.83	44.9	11.56	25.3 ₁	49.88	22.0
17	30.04	45.0	25.22	$\frac{44.9}{44.8} = \frac{1}{1}$	11.98 42	$25.2 \frac{1}{1}$	50.25 37	32.0
27	30.34	45.9	25.84 50	44.9	12.41 43	25.3	50.63 38	32.0
Okt. 7	30.64 30	45.7	20.34	45.2 3	12.83	25.5	51.01 38	000
17	30.94	45.3 6	26.83	45.7	13.24	25.9 6	51.39 36	32.4
27	31.23	44.7	27.31	46.5	13.64	26.5	51.75	32.7
Nov. 6	21 50 27	43.0	27.76 45	47.6	74.00	27.2 7	52 CO 34	22 1 4
16	31.76	43.0	28.18	48.8	14.38	28.0	52.41	33.6
26	31.99 20	42.0	$28.55 \frac{37}{32}$	50.3 16	14.70 32	29.0	52.71 30	34.1
Dez. 6	32.19	41.0	28.87 26	51.9	14.97	30.I	52.96	34.8 7
16	32.35	39.9	29.13 18	53.7	15.20	31.4	52.17	25 6
2 6	32.47 8	30.0	29.31	55.6 20	15.36	32.7	53.32	36.5
36	3 ² .55	38.1	29.42	57.6	15.47	34.0	53.43	37-5
Mittl. Ort	27.68	30.0	21.80	45.2	8.83	22.7	47.32	26.9
see 8, tg 8	1.008	+0.130	1.713	+1.391	1.413	+0.998	1.256	+0.759

T0.74	229) η Co	lumbae.	232) v 0	rionis.	234) 22 H.	Camelop.	236) η Ge	eminor.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
F 7	5 ^h 56 ^m	42° 48′	6 ^h 2 ^m	14° 46′	6 ^h 9 ^m	69° 21′	6 ^h 9 ^m	22° 31′
Jan. o	30.78	65.7	37.55 7	54.5	19.37	17.9 26	38.92 8	66.7
10	30.77 8	68.8	37.62	54.1	19.48	20.5 26	39.00	66.7
20	30.69	71.6 25	37.63	53.7	19.45	23.I ₂₃	39.03 =	66.8
30 E-b	30.56	74.1 21	37.60 7	53.4 2	19.30	25.4 21	39.01	67.0 2
Febr. 9	30.38	76.2 16	37-53	53.2	19.03	27.5	38.94	67.2
19	30.16	77.8	37-43	53.I o	18.67	29.2	38.83	67.4
März 1	29.91 28	79.0 6	37.29 16	53.I o	18.24 50	30.6	38.69 16	67.5
11	29.63 28	79.6	37.13	53.1 o	17.74	31.4 3	38.53 18	67.6
21	2 9.35 ₂₈	79.8	36.96	53.1 o	17.22	31.7	38.35	67.7
31	29.07	79.5	36.79	53.1	16.70	31.6	38.18	67.7
April 10	28.81	78.7	36.64	53.1	16.21	30.9	38.02	67.7
20	28.57	77.5	36.51	53.2	15.76 45	29.8	37.88	67.6
30	28.36	75.8 21	36.40	53.3 2	15.39 28	28.3	37·77 8	67.5
Mai 10	28.20	73.7 24	36.34	53.5 2	15.11	26.5	37.69	67.3
20	28.08 7	71.3	36.31	53.7	14.92	24.4	37.66	67.2
30	28.01	68.6	36.33	54.1	14.85	22.0	27.67	67.1
Juni 9	27.99	65.7	36.38	54.5	14.88 3	196 25	37.72	67.1
19	28.03	62.7 30	36.49	54.9 6	15.02 29	17.1 27	37.82	67.0
29	28.13	59.2 35	36.64	55.5 5	15.31	14.4	37.97 18	67.1
Juli 9	28.27	50.1	36.82	56.0	15.00	12.I	38.15	67.2
19	28.45	53.0	27.02	56.6	-16.14	0.0	38.37	67.3
29	28.68	50.3	37.27 ₂₆	57.2 6	16.68 54	7.9 18	38.61	67.4
Aug. 8	28.95 27	47.8	37.53 28	57.8	17.30 67	6.1	38.88 27	67.6
18	29.24 32	45.7	37.81	58.2	17.97 72	4.6	20.16	67.7
28	29.50	44.0	38.11	58.6	18.00	3.4	39.47	67.9
Sept. 7	29.90	100	38.41	58.9	19.45	2.5	39.79	67.0
17	20.26	12.2	28.72	50.0	20.24 /9	2.0	40.11	67.9
27	20.61 33	12.2	30.04	59.0	21.04 81	T.8	40.44 33	67.8
Okt. 7	30.07	42.0	39.35 31	58.9	21.85	2.0	40.77	07.0
17	31.32 35	44.2	39.66	58.5	22.64	2.6	41.10 33	07.4
27	31.64	45.0	39.96	58.1	23.41	2.5	41.42	67.2
Nov. 6	21.04	18 2 -3	40.25	FM 6 3	24 74 73	17	11 72 31	66.0
16	32.21	50.0	40.52	57.0	24.81	6.3	42.02	66.5
2 6	32.44	52.0	40.77 22	56.3 7	25.41	8.3	12 20 -/	
Dez. 6	32.62	57.1	40.00	55.6	25.92	10.5	42.53	66.0°
16	32.74	60.5	41.17	54.9 6	26.33	T2 8 23	12.72	65 8
2 6	32.8r	63.8 33	41 21 14	54.3	26.62	T5.4 20	42 88	65.7
36	32.83	67.0 32	41.40	53.9	26.79	18.0	42.99	65.6
Mittl. Ort	29.02	70.8	36.28	46.5	15.71	7.6	37.58	58.6
sec δ, tg δ		0.927	1.034	+0.264		+2.654		+0.41

-1-1	240) ξ Ca	nis maj.	241) µ G	eminor.	242) \$\psi^1 A	Aurigae.	243) β Ca	nis maj.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	6 ^h 16 ^m	30° 1′	6 ^h 17 ^m	22" 33	6 ^h 18 ^m	49° 19′	6 ^h 18 ^m	17° 54'
Jan. o	59.82	20.3 28	43.22	40.9	13 92 11	69.3 16	53.40	36.7 23
10	59.86	23.1 26	43.31 3	40.9	14.03	70.9 16	53.45	39.0 21
20	59.84 7	25.7 23	43.34	41.0	14.06	72.5	53.46	41.1 18
30	59.77	28.0 20	43.33 6	41.1	14.03	74.0	53.42	42.9 16
Febr. 9	59.66	30.0	43.27	41.3	13.93	75.4	53.33	44.5
19	59.51	21.6	42.17	41.5	12.77	76.6	52.21	45.8
März i	50.32	32.8	43.03 16	41.7	12.57	776	53.06 18	46.7
11	50.11	33.5	42.87	41.8	13.33 26	78.2	52.88	47.4 2
21	58.89 22	33.0	42.70 18	41.9	13.07 26	78.6	52.69 18	47.6
31	58.67	33.8	42.52	42.0	12.81	78.6	52.5I	47.5
April 10	58.46	5	42.36	41.9	12.57	78.2	52.33 16	47.2
20	58.27	33.3 9	12.22	41.9	12.25	77.6	52 17	16.5
30	58.10	31.2	12 10	41.8	12.17	76.7	52.02	15.1
Mai 10	57.97	29.5	12.02	417	1204 3	75.6	51.02	44.T
20	57.88	27.6	41.98	41.5	11.96	74.3	51.85	42.6
	5	22	0	1	2	15	2	10
Juni 9	57.83	25.4 24	41.98	41.4 0	11.94	72.8	51.83	40.8 38.8
-	57.82	23.0 26	42.03 9	41.4	11.99 11	71.3	51.84	
19	57.86 4	20.4 30	42.12	41.3 0	12.10	69.8 17 68.1	51.89 11 52.00	36.7
Juli 9	57.95 12	17.4 27	42.26	41.3	12.28	66.7	1.5	34.3 22
Jun 9	58.07	14.7	42.44	41.4	12.51	14	52.13	32.1
19	58.24 20	12.1	42.64	41.5	12.78	65.3	52.30 20	29.9 20
29	58.44	9.6 23	42.88 26	41.6	13.10 26	64.0	52.50 22	27.9
Aug. 8	58.67 26	7.3 19	43.14 29	41.7 o	13.40 20	02.9	52.72 25	26.0
18	58.93 28	5.4 16	43.43 30	41.7	13.05	62.0 8	52.97 27	24.4
28	59.21	3.8	43.73	41.8	14.26	61.2	53.24 28	23.1
Sept. 7	50.50	2.6	44.04 32	41.8	14.60	60.5	53.52 29	22.2
17	50.81 31	2.0	44.36	41.7	15.13 44	60.1	53.81	21.7
27	60.13 32	1.0	44.69 33	41.6	15.59	59.8 3	54.11 31	21.6
Okt. 7	60.45	2.4 5	45.02 33	41.4 2	16.05 46		54.42 30	22.0
17	60.77	3.3	45.35	41.1	16.51	59.8	54.72	22.8
27	61.07	4.8	45.68 33	40.7	16.95	60.2	55.01 28	2.4. I
Nov. 6	61.36 29	6.7	46.00	40.4	17 28 43	60.8	EE 20	25 8
16		9.1 26	46.29 29	40.0	17.79	61.6	55-55	27.8
26			1 46 57	30.6	18.16	62.5	55.70	20.0
Dez. 6	62.07	14.6	46.81	39.3	18.49 33	63.7	56.00	32.4
16	62.24	29	47.02	2	18 76	65 T	56 17	2
2 6	62.35	17.5 30	47.02 16	39.1	18.76	66.6	-6	34.9
36	62.40	20.5 30	47.30 12	39.0 38.9	19.12	68.1	56.37	37.4 2
		23.5	4/.3	1 20.9	19.12	100.1	50.57	77.0
Mittl, Ort	58.36	2 6.8	41.86	33.0	11.95	60.4	52.09	43-4
sec 8, tg 8	1.155	0.578	1.083	+0.417	1.535	+1.164	1.051	-0.323

	244) 8 M	onocerot.	245)	α	Argus.	246) 10 M	onocerot.	2 47) 81	Lyncis.
1913	AR.	Dekl.	AR.		Dekl.	AR.	Dekl.	AR.	Dekl. - -
11 17 11	· 6" 19"	4° 38′	6h 21	m	52° 38'	6 ^h 23 ^m	4° 42'	6 ^h 2 9 ^m	61° 33′
Jan. o	10.74 8	23.3 11	63.29	2	45.3 35	41.06	20.6	47.34	40.5
10	10.82	22.2	63.27	9	40.0 22	41.13	22.2	47.48	42.7
20	$10.85 \frac{3}{2}$	21.3 8	63.18	16	52.0 29	41.16	23.7	47.52	45.0
30	10.83 6	20.5 7	63.02	22	54.9 25	41.14	25.0	47.47	47.1
Febr. 9	10.77	19.8	62.80	26	57.4	41.07	26.1	47.33	49.0
19	10.67	19.3	62.54	31	59.5	40.97	26.9 6	47.11	50.7
März 1	10.54	19.0	62.23	34	61.0	40.84 16	27.5	46.82	52.0
11	10.39 16	18.8	61.89	36	62.1	40.68	27.9 2	40.48 36	53.0
21	10.23	18.7	61.53	35	02.0	40.51	28.1	40.12	53.5
31	10.06	18.8	61.18	35	62.6	40.34	28.0	45.74	53.6
April 10	9.90	10.0	60.83		62.2	40.18	27.8	15.28	53.3 8
20	9.76	19.3	60.50	33	61.2	40.04	27.3 5	45.06 32	52.5
30	9.65	19.7 6	60.21	25	59.7	39.92	26.6	44.78	51.4
Mai 10	9.57	20.3	59.96	20	57.8 23	30.82	25.7	44.56	50.0 18
20	9.52	21.0	59.76	15	55.5	39.77 5	24.7	44.41 7	48.2
30	9.52	21.7	59.61		52.8	39.75	23.5	44.34	46.3
Juni 9	9.56	22.6	59.52	9	40.0	39.78 6	22.1	44.35	44.2
19	9.63 7	23.6	59.49	3	46.8	39.84 11	20.6	44.44	42.I 24
29	9.76	24.8	59.53	10	43.3 35	39.95	18.9	²⁸ 44.63 ₂₆	39.7
Juli 9	9.91	25.9	59.63	16	40.0 33	40.00	17.4	44.89	37.5
19	10.09	26.9 11	59.79	21	36.8	40.27	T5.0	45.22 38	35.5
29	10.30	28.0	60.00	26	33.8 30	40.47	14.4	45.00	33.6
Aug. 8	10.54	28.9 9	60.26		31.0	40.69	13.1	46.05	31.Q' 1
18	10.79 28	29.7 6	60.57	31	28.6	40.94 26	11.9	46.54	30.4
28	11.07	30.3	60.91	34	26.7	41.20	11.0	47.07 53	29.1
Sept. 7	11.35	30.7	61.28	37	25.2	41.48	10.4	47.63	28.0
17	11.65	20.0	61.68	40	24.4	41.77	10.0	18 22 59	27.3
27	11.05	30.0	62.09	41	24.1	42.07	10.0	18 82 00	26.8
Okt. 7	12.25	30.6	62.51	42	24.5	12.37	10.4	40.42	26.7
17	12.56 31	30.1 3	62.92	41	25.6	42.66	11.1 7	50.04	26.8
27	12.85	29.2	62.21	39	27.2	12.06	12.1	50.63	27.2
Nov. 6	T2 T4 29	28.2	63.67	36	20.4	12 24	12.4	51.21 58	28.0
16	13.41	27.0	64.00	33	32.I 27	43.51	14.9	51.75	29.0
26	T2.66	25.8	64.28	28	35.2 31	12 75	T66	52.25	20.4
Dez. 6	13.88	24.5	64.50	22	38.6 34	43.73 22	18.4	52.69	32.1
	19	13		16	30	19	19	36	19
16	14.07	23.2	64.66	9	42.2 36	44.16	20.3 18	53.05 28	34.0
26	14.22	20.8	64.75	2	45.0 35	44.30 9	22.I 22.8 17	53.33 19	36.1 38.2
36	14.32	40.0	64.77		49.3	44-39	23.8	53.52	30.4
Mittl. Ort	9.49	16.0	61.17		52.1	39.81	27.6	44-55	32.1
sec δ, tg δ	1.003	+0.081			-1.310		-0.082	2.100	-+1.846

	249) ξ² Ca	nis maj.	248) 23 H. (Camelop.	250) 51 A	Lurigae.	251) γ Gem	inorum.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl,
	6 ^h 31 ^m	22" 53"	6 ^h 31 ^m	79° 39′	6 ^h 32 ^m	39° 28′	6 ^h 32 ^m	16° 28′
Jan. o	25.94 6	35.9 26	31.97 22	48.4 29	39.57 12	14.3	42.51	35.0
10	26.00	28.5	32.10	5T.2	39.69 6	T5.2	42.61	34.6
20	26.01	40.8 21	32.16 3	54.3 28	30.75	164	12.66	34.3
30	25.97	12.0	31.88	57.T	20.75	17.5	42.66	34.1
Febr. 9	25.88	44.8	31.37	59.6 25	39.69	18.5	42.61	34.0
	12	15	70	21	12	9	8	0
19	25.76	46.3	30.67 87	61.7	39.57 16	19.4	42.53	34.0
März 1	25.60 18	47.4 8	29.80 98	63.4	39.41	20.1	42.40	34.0
11	25.42 20	48.2	28.82	64.6	39.22 20	20.7	42.25 16	34.1 0
21	25.22 20	48.6	27.75 108	65.3	39.02	21.1	42.09 17	34.1
31	25.02	48.7	26.67	65.4 -	38.80	21.2	41.92	34.2
April 10	24.83	48.3	2=62	64.9	38.60	21.1	41.76	34.3
20	24 66	17.6	2464 90	62.0	38.42	20.8 3	41 61 15	34.4
30	24.50	16.6	22.77	62.4	28.27	20.2	41.40	24.5
Mai 10	24 28 12	45.3	22.05	60.4	38.15	TO 5 7	41.40	34.7
20	24.30 8 24.30	43.6	22.51 55	58.2	38.08	18.7	41.35	34.8
	5	10	34	26	2	9	41.55	2
30	24.25	41.8	22.17	55.6 28	38.06	17.8	41.34	35.0
Juni 9	24.24	39.7	22.03	52.8 28	38.10 8	16.8	41.38	35.3
19	24.28	37.4 23	22.11	50.0	38.18	15.7 10	41.45	35.6 3
29	24.36	35.1 27	22.40	47.0	38.31	14.7	41.56	35.9
Juli 9	2 4.48	32.4	22.95	43.8	38.51	13.6	41.73	36.2
19	24.63	30.1	22.65	47.0	38.73	12.7	4101	36.6
29	24.82	27.9	24.53	38.5 25	39.00 27	11.8 9	42.12	36.9
Aug. 8	25.03	258	27 76 103	-6 - 3	39.29	11.0 8	12 26 24	37.2
18	25.27	1 10	26 74	24.2	39.29 32	10.2	12 62 20	
28		24.0	28.03	34.2 18		0	20	37.5
	25.54 28	22.5	139	32.4	39.96	9.6	42.90	37.7
Sept. 7	25.82	21.5 6	29.42	31.1	40.32 38	9.0	43.20 30	37.7
17	26.11	20.9	30.88	20 T	40.70 39	8.5	43.50	37.7
27	26.42 30	208 -	32.39	20.5	41.09 39	8.1	43.82 32	37.5
Okt. 7	20.72	21.1 3	33.91	20.4	41.48	7.8 3	44.14 32	37.1
17	27.03	22.0	35.43	29.7	41.88	7.7	44.46	36.6
27	30	22 2	26.02	20.4	42.27	7.6	44.78	36.1
Nov. 6	27.33 30 27.63	23.3		30.4 12	12 65 30	1		_
16		25.0 21	38.33	31.6	1 10	7.7 2	45.09 29	35.4
	27.90 25	27.1	39.64	33.2 20	43.01 34	7.9	45.38 28	34.7
Dez. 6	28.15	29.5 26	40.81	35.2 24	43.35 30	8.3 ⁴ 8.8 ⁵	45.66	33.9
-/02. 0	28.37	32.1	41.83		43.65	8.8	45.91	33.2
16	28.55	34.9 27	42.64	40.2	43.91 20	0.5	46.12	32.5
26	28.68	37.6	43.22	43.0	44.11	10.4	46.29	31.9
36	28.77	40.2	43.57	46.0	44.26	11.3	46.42	31.4
Mittl. Ort	24.59	42.9	24.32	39.6	37.89	6.6	41.19	27.7
$\sec \delta$, $\operatorname{tg} \delta$. ,				+0.823		

	252) v	Argus.	253) S M	onocerot.	254) ε Gen	oinorum.	256) \$ G en	inorum.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	6 ^h 35 ^m	43° 6′	6 ^h 36 ^m	9° 58′	6 ^h 38 ^m	25° 13'	6 ^h 40 ^m	12° 59′
Jan. 0 10 20	7.65 7.68 3 7.65 9 7.56	62. ⁷ 1 65.3 3 ² 68.4 29 71.3 24	12.52 12.62 12.67 12.67	44.3 8 43.5 7 42.8 5	36.25 36.37 36.43 36.43	12.5 2 12.7 2 12.9 3 13.2	25.72 25.83 25.88 5 25.89	31.7 6 31.1 6 30.5 4 30.1
Febr. 9	7.41 x9	73.7	12.62 5	41.9	36.39	13.6 4	25.85	29.8 3
März 1 11 21 31	7.22 6.99 6.73 6.45 6.17	75.8 16 77.4 11 78.5 7 79.2 1 79.3 —	12.53 12 12.41 14 12.27 16 12.11 17	41.6 2 41.4 1 41.3 0 41.3 1	36.30 36.17 36.02 36.02 18 35.84 17 35.67	13.9 4 14.3 3 14.6 3 14.8 1 14.9	25.76 25.64 25.50 16 25.34 25.17	29.7 29.6 29.6 29.6 29.7
A pril 10	5.90 ₂₆ 5.64 ₂₃	79.0 8 78.2	11.79 11.64	41.5 41.7	35.50 16 35.34 12	15.0 1	25.01 24.86 15	29.8 30.0
Mai 10	5.41 19 5.22 16 5.06 11	76.9 16 75.3 21 73.2 23	11.52 11.43 11.38	42.0 42.4 42.8	35.21 9 35.12 6 35.06	14.8 14.6 14.4	24.74 24.65 24.60 5	30.2 30.5 30.8
Juni 9	4.95 6 4.89 4.88 -	70.9 27 68.2 29 65.3 30	11.37 11.39 11.46	43·3 6 43·9 6 44·5 7	35.05 ² 35.07 ₇ 35.14 ₁	14.2 13.9 2 13.7 2	24.58 24.61 3 24.67	31.1 3 31.5 4 32.0 5
Juli 9	4.92 5.02	62.3 59.0 30	11.56 11.71 18	45.2 8 46.0 7	35.26 17 35.43 19	13.5 ₂ 13.3 ₂	24.77 24.92 17	32.5 33.1 5
Aug. 8 18 28	5.16 5.34 5.57 26 5.83 29 6.12	56.0 29 53.1 26 50.5 23 48.2 20	11.89 12.09 12.31 12.57 12.84	46.7 47.4 48.0 48.5 48.9	35.62 35.84 36.09 36.36 36.65	13.1 13.0 12.8 12.6 12.4	25.09 20 25.29 23 25.52 25 25.77 27 26.04	33.6 34.0 34.5 34.9 35.1
Sept. 7	6.45 6.79 35	44.8 9	13.12 13.41 13.41 31	49.1 49.1	36.96 37.29	12.2 11.9 3	26.33 29 26.62 31	35.2 1 35.1 2
Okt. 7	7.14 36 7.50 36 7.86 35	43.6 3 43.9 9 44.8 15	13.72 31 14.03 31 14.34 31	49.0 48.6 48.1 8	37.62 34 37.96 34 38.30 34	11.6 11.2 10.8 4	26.93 32 27.25 31 27.56 31	34.9 34.5 34.0 7
Nov. 6	8.21 8.54 8.85 31 8.85	46.3 20 48.3 26 50.9 20	14.65 14.95 29 15.24	47·3 9 46.4 10 45·4 10	38.64 38.98 31 39.29 30	10.4 10.0 4 9.5 3	27.87 28.18 28.48 30 28.48	33.3 8 32.5 9 31.6
Dez. 6 16 26	9.12 9.35 9.53 9.53 9.65 6	53.8 57.0 33 60.3 63.8	15.51 15.75 21 15.96 16.13	44.4 11 43.3 11 42.2 10 41.2	39.59 ₂₇ 39.86 ₂₃ 40.09 ₁₉ 40.28 ₄	9.2 3 8.9 3 8.7 0 8.7 0	28.76 29.00 22 29.22 18 29.40	30.6 10 29.6 9 28.7 8 27.9 8
3 6	9.71	67.2 34	16.25	40.3	40.42	8.7	29.53	27.9 8 27.1
Mittl. Ort sec δ, tg δ	5.93 1.370	69.5 -0.936	11.24	37.2 +0.176	34.84 1.105	5·4 +0.471	24.42 1.0 2 6	24.6 +0.231

	257) a Ca	nis maj.*)	258) 18 M	onocerot.	261) 9 Gen	ninorum.	262) a F	ictoris.
1913	AR.	Dekl.	AR.	Dekl. - 1 -	AR,	Dekl. -H	AR.	Dekl.
	6 ^h 41 ^m	16° 35'	6 ^h 43 ^m	2° 30'	6 ^h 47 ^m	34° 4′	6 ^h 47 ^m	61° 50′
Jan. o	20.03	39.6	20.76	36.1	4.96	8.2 6	20.61	43.2 36
10	20.10	41.9 22	20.86	34.8 13	5.10	8.8 8	20.59 10	40.0
20	20.13	44.I 20	20.91	22.7	5.17 7	9.6 8	20.49 20	50.3 35
30	20.10	46.1 16	20.01	32.7 8	5.10	10.4 8	20.20	53.5 28
Febr. 9		47.7	20.87	31.0	5.14	11.2	20.02	56.3
	11	14	9	- 6	9	7	35	25
M# 19	15	49.1	20.78	31.3	5.05 13	11.9 7	19.67 40	58.8
März 1	10	50.1 7	20.67	30.8	4.92	12.6	19.27 44	60.8
11	1 18	50.8	20.52 16	30.5 ₁	4.75 18	13.2	18.83	62.2
21	19	51.2	20.36	30.4 -	4.57 20	13.0	18.30 48	63.2
31	19.24	51.3	20.20	30.5	4.37	13.8	17.00	63.6
April 10	T0.06	FTT	20.04	30.6	4.18	13.8	17.41	63.5
20	1 00 1/	50.5	то.80	31.0	4.01	13.7	16.05	62.8
30	18.75	10.6	19.77	31.4	3.86	13.4	16.52 42	61.7
Mai 10	T8.64	48.5	TO 67	32.0	3.75	12.9	16.15	60.I
20	8	- 13	19.61	7	3.68	12.4 5	15.82 33	58.0 21
20	4	47.2	19.01	32.7	3.00	7	27	24
30		45.6	19.59	33.6	3.65 -	11.7	15.55 19	55.6 28
Juni 9	- 2	43.8	19.60	34.5	3.67 6	11.0	15.36 13	52.8
19	18.55 8	41.9 21	19.65	35.5	3.73	10.3 8	15.23	49.0
29	18.63	39.8	19.75	36.6	3.84	9.5 8	15.18	46.5 36
Juli 9	18.76	37.6	19.89	37.8	4.01	8.7	15.22	42.9
19	15	20	10 05	11	20	8.0 7	11 00	39.6
_	10	35.6	20.05	38.9	4.21	- 7	15.33 19	
Aug. 8	21	33.7 18	20.24	40.0	4.45 26	7.3 6	15.52 26	36.4 29
0	23	31.9	20.45	40.9 8	4.71 29	6.7	15.78 32	33.5 27
18	20	30.4	20.69 25	41.7	5.00 31	6.0 6	10.10 38	30.8
28	19.79	29.2	20.94 28	42.4	5.31	5.4	16.48	28.6
Sept. 7	20.06	28.4	21.22 28	42.8	5.64	4.9 6	16.01	26.8
17	20.35	27.9	2.T.50	42.9	5 00 35	4.3	17.38 47	25.6
27	20.64	27.8	21.80	42.8	6.25	3.8 5	T7 87 49	25.T
Okt. 7	20.01	28 2 5	22.10	42.4	6.72	3.4	18.38 51	25.2
17	31	29.1	22.41	41.7	7.09 37	3.0	18.89 51	25.9
,	30	13	30	9	37	3	50	14
N 27	21.55 29	30.4	22.71 30	40.8	7.46	2.7 3	19.39 47	27.3 20
Nov. 6	2/	32.1	23.01 28	39.7	7.83	2.4	19.80	29.3 20
16	. 25	34.I 22	23.29 27	38.4	8.17	2.3 0	20.20 26	31.9 30
D 26	22.30	36.3	23.56	37.0	8.50	2.3	20,04	34.9
Dez. 6	22.58	38.7	23.80	35.5	8.80	2.4	20.93	
16	22.77	11.2	24.01	34.0	9.06	2.7 5	21.15	41.8
26	22.01	12.8	24.17	32.6	9.27		21.27	1=6 3
36		45.0 24	24.30	31.2	-/	3.7	21.31	49.6
30	25.01	40.2	24.3	31.4	9.44	3.7	21.31	49.0
	0.0				-			0
Mittl, Ort	18.96	46.1	19.51	29.0	3.39	1.4	17.97	51.8

⁾ Ort des Hauptstorns; die jährliche Parallaxe ist bereits angebracht.

AR. Bek. AR. AR. Bek. AR. AR. Bek. AR. AR. Bek. AR. AR. Bek. AR. A	****	265) 15	Lyncis.	266) N Ca	mis maj.	268) ε Ca	nis maj.	269) \$ Ge	eminor.
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1913	AR.		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
To		6 ^h 49 ^m	58° 32'	6 ^h 50 ^m	11° 55′	6 ^h 55 ^m	28° 50'	6h 58m	20" 41"
To 47.60 2 27.8 21.026 4 41.1 18 13.85 3 68.9 25 58.62 3 61.0	Jan. o		23.6	10.13	37.1		63.2		62.0
20		. 0	25.7	10.22	20.2		66.1 ₂₈	58.51	61.8
Febr. 9 47.60 9 31.8 19 10.20 5 42.9 15 13.82 8 71.4 22 58.60 3 61.5 19 47.60 9 31.8 19 10.21 5 44.4 12 13.74 12 73.6 18 58.59 3 61.5 11 47.20 29 35.0 15 9.99 15 46.5 7 13.46 18 76.0 11 46.91 32 36.8 7 9.84 17 47.2 7 4 13.28 21 78.7 75.4 15 58.41 15 62. 58.26 16 62			27.8	10.20	4 T T	13.05	68.9		61.7
März I 47.20 29 35.0 11 9.99 14 47.7 1 13.6 16 75.4 15 58.52 11 6.21 46.91 32 36.8 7 21 46.59 33 37.1 3 9.49 17 22 45.63 27 35.7 12 9.42 11 12.86 21 78.8 5 57.48 10 63. April 10 45.93 30 37.0 4 9.90 17 47.7 1 12.86 21 78.8 5 57.48 10 63. Mai 10 45.14 15 33.0 17 18 8.88 7 3 30.5 18 19 9.49 17 12.20 18 18 78.0 7 18 18 58.52 11 6.22 17 78.7 3.6 63. Juni 9 44.88 6 29.4 20 8.88 7 3 30.5 18 19 9.40 17 18 47.5 19 18 18 78.0 7 18 18 18 78.0 7 18 18 18 78.0 7 18 18 18 18 18 18 18 18 18 18 18 18 18			- 10	5	15	- 0	22	50.02	61.8
März 1 47.44 24 33.5 15	reor. 9	47.60		10.21	44.4	13.74	73.6	50.59	61.9
Mair 1			22.5	10.12		- 10		58 52	62.1
11 46.91 3 36.8 7 9.84 7 47.6 4 13.28 21 78.0 7 58.26 16 62. 21 46.59 33 37.1 3 9.44 77 2 12.86 21 78.7 3 2 78.7 3 57.94 17 April 10 45.93 30 37.0 4 9.32 16 47.7 2 12.85 21 78.8 5 57.94 17 Mai 10 45.94 15 35.7 12 8.91 8 45.3 12 12.45 7 77.4 13 3 57.38 63. Mai 10 45.14 15 34.5 15 8.83 44.1 12 12.02 17 76.1 16 57.98 76.1 16 57.98 77.5 13 57.38 63. Juni 9 44.89 1 27.4 21 8.88 1 3 39.5 18 11.94 72.6 22 57.28 1 63. Juli 9 45.57 33 23.0 23 23.0 23 23.0 23 23.0 23 23.0 23 23.0 23 23.0 23 23.0 23 23.0 23 23.0 23 23.0 23 23.0	März 1	47.20	35.0	0.00	46.5	13.46	70.9 11	58.41	62.3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	11	46.01	36.1	0.84	47.2	13.28	78.0	EX 20	62.5
April 10		46.59	30.8	0.67	47.0	13.07	78.7	E8 TO	02.8
April 10	31	40.20	37.I	9.49	47.7	12.86	79.0 -	57.94	63.0
Mai 10 45.74 15 35.7 12 8.83 12 44.1 13 12.02 8 74.5 19 57.48 10 63. Mai 10 45.74 15 33.0 17 8.89 1 8 45.3 12 12.13 15 76.1 16 57.38 76.3 16 63. Juni 9 44.88 6 29.4 20 8.88 1 39.5 18 19 44.94 13 25.3 23 23.0 20 14 29 45.07 23 23.0 20 20 14 29 45.07 33 10.1 18 9.31 20 35.7 19 45.88 12 37.7 20 14.0 4 29 45.90 38 10.1 18 9.31 20 33.5 18 11.90 4 46.3 10 4.2 17 11.90 4 46.3 10 4 46.3 10 4 47.0 4 48.7 10 4	April 10	45.03	37.0	0.22	17.5	T2.65	78.8	כים חים	63.1
Mai 10 45.36 22 35.7 12 9.02 14 46.3 10 12.28 17 77.4 13 76.1 16 57.38 7 63. Mai 10 45.14 15 34.5 15 8.83 5 44.1 1 12.02 8 74.5 19 9.24 44.99 9 33.0 17 88.83 5 44.1 1 12.02 8 74.5 19 57.38 7 63. Juni 9 44.90 2 31.3 19 8.78 0 42.8 16 11.90 4 74.5 19 57.28 3 1 63. Juli 9 44.94 13 25.3 23 8.88 12 37.7 20 11.90 4 65.6 28 57.29 5 63. Juli 9 45.57 33 19.1 8 8.88 12 37.7 20 11.90 4 66.2 25 57.43 14 63. Aug. 8 46.28 43 17.3 16 9.51 23 30.5 14 12.23 19 55.6 20 12.24 12 12.8 18 19.9 12.25 22 25 25.6 20 12.2 25 25.6 20 12.2 25 17.4 28	20	45.62	36.6	0.16	47.0	12.45	78.3	57.6T	63.2
Mai 10	30	15.26	25.7	0.02	16.2	12.28	77.4	57.48	63.3
30 44.99 9 31.3 17 8.83 5 44.1 13 12.02 8 74.5 19 57.31 3 63.5 63.5 19 44.94 13 27.4 21 29 45.07 23 23.0 20 27 20 27 20 27 20 27 28 27 28 27 20 20	Mai 10	45.14	24.5	NOT.	45.3	12.12	76 T 13	57.38	63.3
Juni 9	20	44.99	33.0	8.83	44.1	12.02	74.5	57.31	63.3
Juni 9 44.88 6 29.4 29 8.78 3 41.2 17 11.90 70.4 23 57.29 5 63. Juli 9 44.94 13 25.3 23 39.50 18 11.90 4 63. 57.29 5 63. Juli 9 45.97 23 25.3 23 23 23 23 23 23 23 23 25.7 21.0 19 9.14 17 33.8 17 11.94 10 63.6 2.8 57.57 14 63. 29 45.90 38 19.1 18 9.51 23 25.1 16 12.23 19 55.6 28 57.793 23 63. 18 46.71 15.7 15 9.94 25 27.9 8 12.27.4 26 53.6 17 58.68 27 58.64 25 58.41 25 58.41 25 <td>20</td> <td>1</td> <td>17</td> <td>8 78 5</td> <td>12 8 13</td> <td>1</td> <td>19</td> <td>E7 28 -3</td> <td></td>	20	1	17	8 78 5	12 8 13	1	19	E7 28 -3	
Juli 9	Υ	1188 -	- 19			4	22	1	
Juli 9 45.07 23 23.0 23 23.0 20 35.7 19 11.94 10 65.6 28 57.57 14 63.57 19 45.57 33 19.1 18 19.1 18 19.57 15 14.2 12 27.9 8 12.52 22 55.6 20 58.41 27 63.8 18 17.3 16 19.7 15 12.04 10 10.05 28 11.2 27.9 8 13.57 17 18.2 17 18.2 18.2 18.2 18.2 18.2 18.2 18.2 18.2	,	14.04	27 1		20 5	- 0		57.24	
Juli 9 45.30 23 23 23 20 35.7 19 45.57 33 57.57 14 33.8 17 12.04 25 57.57 14 63. 29 45.90 38 19.11 18 9.51 23 30.5 14 12.52 22 57.74 19 63. 18 46.71 47 17.3 16 9.51 23 30.5 14 12.52 22 55.6 20 58.16 25 57.74 19 63. 28 47.18 47 14.2 19.99 26 27.1 12.52 22 55.6 20 58.41 27 63. Sept. 7 47.68 13.0 10.25 28 27.1 41.22 13.57 30 50.6 8 58.97 30 62. Okt. 7 49.82 56 10.7 2 11.12 30 11.22 13.87 30 14.19 32.11 14.51 30 31.51 14.51 30.3 31.51<	-	1.4	2.1	7	27.7	4	6r 6 25	57.43	
19	T 11	3 25	2.3	1 12	20	. 10	- 40	3	63.3
Aug. 8 45.90 38 17.3 16 9.51 20 30.5 14 12.52 22 55.6 22 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 63.16 12.52 22 55.6 20 58.16 25 58.16 25 63.16 12.52 24 11.12 11.1		27	20	14	19	12	25	17	
Aug. 8	-	3.4	19	1/		17		* '	03.3
18	,	45.90 28	10	20	10	10			63.3
28			10	-5	14	22		25	
Sept. 7 47.68 50 13.0 10 10.25 28 13.0 10.53 29 27.1 4 26.7 1 4 26.7 1 4 26.7 1 27.1 4 27.1 4 27.1 4 27.1 4 27.1 4 27.1 4 27.1 4 27.1 4 27.1 4 27.1 4 27.1 4 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1			15	3	12	, 20		27	
Sept. 7 47.68 53 13.0 10.25 28 27.1 4 26.6 7 11.12 30 27.7 11 10.5 12.8 11.12 30 27.7 11 10.5 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 13.17 11 12.8 13.27 30 50.6 8 58.97 30 62 59.27 31 62 59.27 31 62 59.27 31 62 59.27 31 62 62.41 61.52 61.63 10.82 61.80 70.0 62.41 61.80 70.0 62.25 62.25 66.24 62.41 61.6 62.41 61.6 62.41 61.6 62.41 61.6 62.41 61.6 62.41 61.6 62.41 61.6 62.41 61.6 62.25 61.6 62.41 61.6 62.25 61.6 62.25 61.80 62.25 61.80 62.25 61.80 62.25 61.80 62.25 61.80 62.25 61.80 62.25 61.80 62.25 61.80 62.25 61.80 62.25 61.80 62.25 61.80 62.41 61.80 62.41 61.80 62.41 61.80 62.41 61.80 62.25 62.25		50		20	27.9		51.9	29	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Sept. 7	47.68	13.0	10.25 28	27.1	13.27	106	58.07	62.8
Okt. $\begin{array}{cccccccccccccccccccccccccccccccccccc$		40.21	T20	10.52	20.7	12.57	49.8	1 50 27	62.5
Nov. 6 50.99 52 11.1 7 11.8 10 12.57 23 36.3 28 14 14.2 16 16 52.81 29 16 53.10 22 19.6 15.8 18 17.6 26 53.32 22 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19.6	C . 7 .	48.70 56	11.2	10.82	26.6	13.87	10.5	59.58	62.0
Nov. $ \begin{array}{cccccccccccccccccccccccccccccccccccc$		49.32 66	IO.7 2	1 11.12	26.9 8	14.10	49.7 8	1 59.9I	61.5
Nov. $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	17	49.00	10.5 -	11.43	27.7	14.51	50.5	00.24	60.9
Nov. 6 $\begin{array}{cccccccccccccccccccccccccccccccccccc$	27	50.44	TO.6	TT.73	28.8	14.83	51.8	60.58	60.2
Dez. $\begin{array}{cccccccccccccccccccccccccccccccccccc$		50.00	TTT	12.02	15	15 14 31	52.5	60.0T 33	59.5
Dez. 6 52.00 44 14.2 14 12.8 23 36.3 23 34.1 22 36.3 23 15.95 20 30 16.15 36 16.30 25 56 16.31 10 16.0 30 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.31 10 16.41 10 16.31 10 16.41 10 16.31 10 16.41	16	51.51	11.8	12.31	32.I	15.44	55.7	61.22	588
16 52.81 29 15.8 18 17.6 20 13.28 13.2		52.00	12.8	12.57	21 T	15.71	-82	61 52 31	58.1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Dez. 6	52.44	14.2	12.80	36.3	15.95	61.0	61.80	57.5
26 53.10 22 17.6 20 13.17 11 40.8 22 16.31 10 67.0 30 62.25 16 56 36 53.32 19.6 13.28 1 43.0 16.41 70.0 30 62.41 56	16	37	TE 8	TOOL	28.6	16.15	64.0	62.05	56.0
		52 TO 29	17.6	12 17	108	16.31	670	62 25	56.4
			19.6		43.0			62.41	56.4 56.1
)	Mittl Oct	44.82		8.87	-	12.26	71.2	57.0T	55.6
							•		+ 0.378

	27I) γ Ca	ınis maj.	273) ō Ca	mis maj.	274) 63 1	Aurigae.	277) à G	eminor.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	6 ^h 59 ^m	15° 29'	7 ^h 4 ^m	26° 14′	7 ^h 5 ^m	39° 27′	7 ^h 13 ^m	16° 41′
Jan. 0 10 20 30	50.63 10 50.73 5 50.78 0	67.2 69.5 71.7 20 73.7	52.53 52.63 52.67 52.65 6	68.°0 28 70.8 27 73.5 25 76.0	42.15 16 42.31 10 42.41 3 42.44 3	54.I 9 55.0 10 56.0 12 57.2	6.99 7.13 9 7.22 7.26 4	59.2 58.7 58.3 58.1
Febr. 9	50.73	75.4	52.59	78.1	42.42	58.3	7.24	58.0
März 1 11 21 31	50.64 50.51 50.36 17 50.19 18 50.01	76.8 77.9 8 78.7 79.2 79.4	52.49 15 52.34 17 52.17 20 51.97 20 51.77 20	80.0 81.5 11 82.6 83.3 7 83.6	42.34 42.20 17 42.03 19 41.84 21 41.63	59.3 10 60.3 8 61.1 6 61.7 4	7.19 10 7.09 13 6.96 16 6.80 16 6.64 16	58.0 58.1 58.2 58.4 58.6
April 10	49.83 49.66	79.2 78.8 ⁴	51.57 51.38	83.6 83.2 4	41.43 ₂₀ 41.23 ₁₇	$62.3 - \frac{2}{3}$	6.48	58.8 58.9
Mai 10 20	49.51 12 49.39 9 49.30 5	78.1 / 10 / 77.1 / 13 / 75.8 / 14	51.21 15 51.06 11 50.95 8	82.3 11 81.2 15 79.7 18	41.06 40.93 40.83	61.8 5 61.3 7 60.6 8	6.19 11 6.08 8 6.00	59.1 59.3 59.5
Juni 9	$\begin{array}{cccc} 49.25 & \frac{2}{49.23} & \frac{2}{2} \\ 49.25 & 6 \end{array}$	74.4 17 72.7 18 70.9 19	50.87 50.83 50.82 50.86	77.9 ₂₀ 75.9 ₂₂ 73.7 ₂₃	40.78 40.78 40.83	59.8 58.9 57.9	5.96 ° 5.96 4 6.00 7	59.6 59.8 60.0 60.2
Juli 9	49.31 10 49.41	69.0 22 66.8 20	750.95	71.4 68.7 24	40.92 41.07 19	56.8 12 55.6 12	6.18	60.4
Aug. 8	49.55 16 49.71 19 49.90 22 50.12 24 50.36	64.8 62.9 17 61.2 16 59.6 12 58.4	51.07 51.22 51.41 51.62 51.87	66.3 64.0 61.8 59.8 16 58.2	41.26 41.49 26 41.75 29 42.04 31	54.4 10 53.4 11 52.3 10 51.3 10 50.3	6.34 ₁₈ 6.52 ₂₀ 6.72 ²⁴ 6.96 ₂₅ 7.21	60.7 60.8 60.9 60.9
Sept. 7	50.62 28 50.90 29	57·5 6 56.9	52.13 52.42 30	57.0 8 56.2 3	42.69 36 43.05 38	49.4 48.6 8	7.48 29 7.77 31	60.7 60.4
Okt. 7	51.19 51.49 51.79	56.8 3 57.1 7 57.8 7	52.72 31 53.03 32 53.35 32	55.9 2 56.1 7 56.8 7	43.43 43.82 44.22 40	47.8 47.1 46.6	8.08 8.39 8.72 33	59.9 6 59.3 58.6 8
Nov. 6	52.10 52.40 52.60	59.0 60.5 62.4	53.67 53.98 54.28	58.0 59.7 61.8	44.62 45.02 45.40	46.2 45.9 45.8	9.04 9.37 9.69	57.8 9 56.9 10
Dez. 6	52.96 53.20 21	64.5 24 66.9 24	54.56 54.80 21	64.2 27 66.9 29	45.77 33 46.10 29	45.8 46.1 3	9.99 28 10.27 25	54.9 54.0 9
16 26 36	53.41 53.58 53.70	69.3 71.8 24 74.2	55.01 55.18 55.30	69.8 72.8 75.7	46.39 46.64 46.83	46.6 47.3 48.1	10.52 10.73 10.90	53.1 52.4 51.8
Mittl Ort	49·37 1.038	74.8 -0.277	51.20	76.2 - 0.492	40.42 1.295	48.4 -1 0.823	5.65 1.0.44	53.I -1-0.300

2 78) π Argus.		Argus.	279) 8 Gen	inorum.	280) 19 Ly	ncis seq.	281) ô V	olantis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	7 ^h 14 ^m	36° 56′	7 ^h 14 ^m	22° 8'	7 ^h 15 ^m	55° 26'	7" 16 ^m	67° 47′
Jan. o	5.63	17.6	57.12	42.0	48.87	51.8 18	55.80 2	41.8 38
10	5.73	20.8 32	57.27	41.9	49.08	53.6	55.82 -	45.0
20	5.76	24.0	57.36 5	41.8	49.21 4	55.5 20	55.73 20	49-3 34
30	5.73 8	26.9 26	57.41	41.9	49.25	57.5 19	55.53 30	52.7
Febr. 9	5.65	29.5	57.40	42.1	49.21	59.4	55.23	56.0 33
19	5.52	31.8	57.2.1	42.4	49.10	61.2	54.83	58.8
März I	5.25	22.6	57.21	12.7	48.01	62.7	54.36 4/	61.2
11	5.75	25.T	57.10	43.0	1867	64.0	53.82 34	63.2
21	4.92	36.1 6	56.05	13.3	48.40	65.0 6	53.25 61	64.6
31	4.68 24	36.7	56.78	43.6	48.11	65.6	52.64	65.5
April 10	4.44	36.7	56.61	43.8	47.81	65.8	52.04 60	65.9
20	4.2.1	26.4	56.45	44.0	17.52	657	51.44	65.8
30	4.00	25.6	56.32	44.0	1727	65.1	50.87	65.1
Mai 10	3.81	24.4	56.20	44.1	47.05	61.2	50.34 53	63.0
20	3.66	32.8	56.12	44.1	46.89	63.0	49.87 47	62.3
20	2 5 4	19	56.08	1	11	61.5	49.46	60.2
Juni 9	3.54 8	30.9 22 28.7	56.08	44.0	$\begin{array}{c c} 46.78 \\ 46.73 & \frac{5}{3} \end{array}$	- 10	49.13 33	20
19	. 3	26.2	76 TT 3	43.9 ₁ 43.8 ₁	16 ==	59.9 19 58.0 19	48.88	57.7 2
29	3.43	27	56.19	43.7	46.83	56.1	18.72	51.0
Juli 9	3.49	23.5 20.8 ²⁷	56.30	43.6	46.98	54.I	48.66	48.7 3
	o II	30	16	1	9 23	22	10 4	3
19	3.60 14	17.8	56.46	43.5 2	47.21	51.9 19	48.70	45.1
1 29	3.74 18	15.1 26	56.65 21	43.3 2	47.48 32	50.0 19	48.83	41.9
Aug. 8	3.92 21	12.5	56.86	43.1	47.80 37	48.1 18	49.06	38.8 2
18	4.13	10.2	57.10 26	42.8 3	48.17 40	46.3 16	49.38	36.0
28	4.38	8.2	57.36	42.5	48.57	44.7	49.78	33.5
Sept. 7	4.65	6.7	57.64 30	42.I	49.01	43.2	50.25	31.4
17	4.96	5.6	57.94 32	41.6 5	49.48 49	41.9	50.70 58	20.0
27	5.28	5.1	58.20	41.1 7	49.97 57	40.8	51.36 6	29.0
Okt. 7	5.01	5.1 6	50.50 34	40.4	50.48	39.9 6	51.97 6:	28.7
17	5.96 33	5.7	58.92	39.7 8	51.00	39.3	52.59 6:	29.I
27	6.30	6.9	59.26	38.9 。	51.53	20.0	53.21	30.I
Nov. 6	6.64 34	8.6	50.50	38.1 8	F2 05 3"	30.0	53.80	31.8
16	6.96	10.0	50.02	37.3	52 56 3	20.2	54.34	34.0
26	7.26 30	12.5	60.24 32	36.6	53.04	39.9	54.83	26.8
Dez. 6	7.52	16.5	60.53	35.9	52.48	40.8	55.22	40.0
16	7.75	19.7	60.70	5	53.86	42.1	55.52	10 =
26	7.02	2.2 0 33	67.07	35·4 34·9 2	54.18 32	43.6	55.53 ₂₀ 55.73	1770
36	8.04	26.3	61.19	34.6	54.43	45.3	55.81	51.1 3
Mittl. Ort	4.17	26.7	55.72	36.3	46.42	47.1	52.71	52.9
sec 8, tg 8	1	1	1001	5 5	1 '	1 /	3	

ODERE KOMMINATION DERIM									
1014	282) t Gen	ninorum.	284) Gr	. 1308.	285) β Ca	nis min.	286) p Gem	inorum.	
1913	AR.	Dekl. -ŀ	AR.	Dekl. 4	AR.	Dekl.	AR.	Dekl. -	
	7 ^h 20 ^m	27° 58′	7 ^h 21 ^m	68° 38′	7 ^h 22 ^m	8° 27′	7 ^h 23 ⁿⁱ	31° 57'	
Jan. o	21.00 21.16	23.9 ₂ 24.1 2	54.23	45.2 47.6 24	27.28 27.42	61.7 60.6	32.62 32.79	35.3	
20	21.27	24.4 5	54.52 54.69 3	50.2	27.52	59.7 7	32.91	35.7 ₆ 36.3 ₇	
3° Febr. 9	21.32	24.9 5 25.4 6	54.72 9	52.7 55.2 25	27.56 27.55	59.0 6 58.4	32.96 32.96 6	37.0 ₇ 37.7 ₈	
März 1	21.25	26.0	54.43 31	57·+ ₂₀	27.50	58.0 3	32.90 10	38.5 8	
11	21.10	26.5 6 27.1 4	54.12 39 53.73 45	59.4 16 61.0 12	27.41 27.28 13	57.7 I	32.80 32.66 14	39.3 ₆ 39.9 ₆	
21 31	20.86	27.5 27.9	53.28 52.79	62.2 63.0	26.98	57.6 57.7	32.49 ₁₈ 32.31	40.5	
April 10	20.51 17	28.1 28.2	52.30 48 51.82	$63.3 \frac{3}{3}$	26.82 26.67	57.8 58.1	32.13 18	41.3	
30	20.31 15	28.2	51.38	63.0 7	26.54	58.4	31.95	41.4 1	
Mai 10	19.98	28.2 28.0	50.68 31 50.68	59.5	26.43 8 26.35	58.8 5	31.67 10 31.57 6	40.8 3	
Juni 9	19.93 19.92	27.6 27.3	50.45 50.32	57.6	26.30 1 26.29	602	31.51 1	40.3 39.8 ⁵	
19	19.96 4	26.9	50.28	55.5 24 53.1 25	26.31	600	31.53	39.2	
Juli 9	- 11	26.4 5 25.9 5	50.35 17 50.52 29	48.0	26.37 25.46	62.2	31.60 11	38.5 7 37.8 8	
19 29	20.30	25.4 6 24.8	50.8 r 51.16 35	45.I 26	26.60 26.77	62.9 63.5	31.88	20.2	
Aug. 8	20.70	24.3 6	51.60 44 52.12 52	40. I	26.96	64.0	32.29	35.48	
28	27	23.7 6 23.1	52.70 6.	35.7	27.17 27.40	64.7	32.82	33.8	
Sept. 7	21.51	22.4 6	53.34 6	33.8 16	27.66 27.93	64.6	33.12	33.0 8	
Okt. 7	22.14 32	20.2	54.77	30.8	28.22	64.3	33.78 35	31.4	
17	30	19.5	56.31	29.2	28.84	63.0	34.50	29.8	
Nov. 6	23.19 36	18.8	57.10	29.2	29.15	00.0	34.87	29.1	
16 26	23.89 34	16.0	58.63	20.8	29.78 3	58.3	35.00 34	27.5	
Dez. 6	24.54	16.5	59.97	32.2	30.35 2	56.9	36.27	27.3	
16 26	1 ' 2.1	16.2	60.53	36.0	30.60 2	-10	20.80	2.7.2	
36	25.23	16.1	61.34	38.3	30.97	53.1	37.00	27.6 °	
Mittl. Ord sec 8, tg 8		18.7	50.28 2.746	41.2	26.02 1.011	55.4 - 1 -0.149	31.06	30.5 -1-0.62.4	
o o, tg	1.132	+0.531	1 4./40	-† 2.558	1.011	1-0.14	1.179	1-0.04.1	

SCHEINBARE STERNRÖTER

444	287) a (lemin.¹)	289) 25 M	onocerot.	291) α Car	nis min. ⁵)	292) 24 Lyneis.	
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.
	7 ^h 29 ^m	32° 4′	7 ^h 32 ^m	3° 54′	7 ^h 34 ^m	5° 2 6′	7 ^h 35 ^m	58° 54
Jan. o	4.50	54.3	58.40	50.8	46.00	61.0	41.92 26	57.0
10	4.67	54.7	E8 E.1 **	526	16 24 15	59.7	12 18	580
20	480 13	55.2 5	58.63	512	46.34	58.6	12 24	61.0
30	4.86	550	58.67	557	16 28 4	576	12.12	62.1
Febr. 9	4.86	56.7	58.66	57.0	46.38	56.8	42.40	65.3
	4	8	5	I I I	4	5	10	2
19	4.82 10	57.5 8	58.61	58.0 8	46.34	56.3	42.30 18	67.3
März 1	4.72	58.3	58.52	58.8 6	46.25	55.9	42.12 25	69.1
11	4.58 16	59.0 6	58.40 15	59.4	46.13	55.6 I	41.87 29	70.6
21	4.42 18	59.6	58.25	59.8	45.99 16	55.5 o	41.58 32	71.8
31	4.24	60.0	58.09	59.9 -	45.83	55.5	41.20	72.7
April 10	4.05	60.4	57.02	50.8	15 67	55.6	40.93	73.1
20	2.88	60.5	57.77	50.6	15 52 13	55.0	40.61	73.1
30	3.71	60 5	57 62	50.2	45 20 -3	56.3	10 21 30	72.7
Mai 10	2.58 '3	60.3	5750 12	58 F	45.27	56.7	10.05	71.0
20	3.48	60.0	57.41	57.7	45.18	57.2 5	39.84	70.8
	0	5	6	9	5	0	15	1
. 30	3.42 2	59.5 5	57.35	56.8	45.13 2	57.8 6	39.69 9	69.3
Juni 9	3.40 2	59.0 7	57.32	55.7 11	45.11	58.4 7	39.60 2	67.6
19	3.42 6	58.3	57.32	54.6	45.12	59.1 8	39.58 -	65.6
29	3.48 10	57.6	57.30	53.3	45.16	59.9 8	39.63	63.6
Juli 9	3.58 16	56.9 8	57.44	52.0	45.26	60.7	39.74	61.4
19	271	56.1	57.56	50.6	45.28	61.5	30.05	c80
29	2.02	55.2 8	57.70	10 2	45.53	62.2	40.20	567
Aug. 8	4.14	711	57.87	18.2	45.70	62.7 5	10.51	545
18	4.38 24	1226	58.07	47.2	45.00	63.2	40.87	52.1
28	4.65 27	53.0 8	58.29	46.5	46.13	63.5	41.28 41	50.4
	30	9	2.4	6	25	1	45	
Sept. 7	4.95 32	51.9 9	58.53 27	45.9	46.38 26	63.6	41.73 49	48.6
17	5.27 33	51.0 8	58.80 28	45.0	46.64 28	63.5	42.22 52	47.0
27	5.00 35	50.2 9	59.08	45.7	46.92 30	63.2 6	42.74 55	45.6
Okt. 7	5.95 36	49.3 9	59.37 31	46.1 8	47.22 31	62.6	43.29 56	44.4
17	6.31	48.4 8	59.68 31	46.9	47.53	61.7	43.85	43.6
27	6.68	47.6	50.00	47.0	47.84	60.6	44.43	43.0
Nov. 6	7.05 37	46.9 7	60 20 31	40.2	48.16 3"	59.3	15 00 5/	42.8
16	7.42 3/	16.15	60.61 31	50.0	48.47 31	57.0	45.56	42.9
26	7.77 33	45.9 2	60.90	52.7	48.77	56.4 16	46.00	12.1
Dez. 6	8.09 32	45.6 3	61.17	54.6	49.04 27	54.8	46.59 50	44.3
	30		25	20	25	15	44	
16	8.39 26	45.5	61.42	56.6	49.29 21	53.3 15	47.03 38	45.4
26	8.65 20	45.6	61.63 16	58.6	49.50	51.8	47.41 30	47.0
36	8.85	45.9	61.79	60.5	49.67	50.3	47.71	48.7
Mittl. Ort	2.94	49.8	57.19	57.8	44.91	55.5	39.17	54.1
sec ò, tg ò	1.180	+0.627	1.002	0.068	1.004	+0.095	1.937	-I-1.6

AR. der Mitte, Dekl. des folgenden helleren Sterns.
 Ort des Hauptsterns. Die jährliche Parallaxe ist bereits angebracht.

								60
7074	294) z Gen	ninorum.	2 95) β Gen	inorum.	296) π Ger	ninorum.	297) \$ V	olantis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. -+	AR.	Dekl.
	7 ^h 39 ^m	24° 36′	7" 39"	28° 14′	7 ^h 41'''	33° 37'	7 ^h 42 ^m	72° 23'
Jan. o	13.27	31.3	61.15 18	17.9	55.59 20	51.9	57.28	37.I ₃₈
IO	13.45	31.2	61.33	18.0	55.79 13	52.4 6	57.36 6	40.9 38
20	13.57	31.3 2	61.46	18.3	55.92 8	53.0	57.30	44.7 36
30	13.64	31.5	61.53	18.7 6	56.00 2	53.7	57.11	48.3
Febr. 9	13.66	31.8	61.54	19.3	56.02	54.6	56.78	51.8 31
19	13.62	32.2	61.50	19.9 6	55.98	55.5 8	56.33	54.9 28
März 1	13.53	32.7 5	61.41	20.5	55.89	56.3	55.78 63	57.7
11	13.41	33.2	61.29	21.2	55.76 16	57. I 7	55.15 70	60.0
2.1	13.26	33.6	61.14	21.7	55.60 18	57.8	54.45 74	61.9
31	13.10	34.0	60.97	22.2	55.42	58.5	53.71	63.3
April 10	12.93	34.4	60.79	22.6	55.23 18	58.9	52.95 76	64.1
20	12.77	34.6	60.62	22.8	55.05	59.1	52.19 74	$64.4 \frac{3}{1}$
30	12.62	34.7	60.46	22.9	54.88	50.T	51.45	64.3 8
Mai 10	12.50	34.8	60.33	22.9 2	54.74	59.0	50.74 65	63.5
20	12.40	34.7	60.23	22.7	54.63	58.7	50.09 58	62.2
30	12 24	31.6	60.17	22.1	54.56	58.2 6	10.51	60.4
Juni 9	12.32	34.1	60.14	22.1	54.53	57.6	40 OT	58.3
19	12.33	34.2	60.15	21.7 5	54.54	56.9	48.61 40	55.8 25
29	12.38 5	33.9	60.20	21.2 6	54.50	56.1	48.31	520
Juli 9	12.47	33.6 ³	60.29	20.6	54.68	55.3	48.12	49.9
19	12.61	33.2	60.43	20.0	54.83	54.3	18 06	46.4
29	12.77	32.8	60.60	10.1	55.00	53.3	48.12	13.2
Aug. 8	12.06	32.3	60.79	18.7	55.21	52.4	18 20	100
18	13.10	31.8	61.02	18.0	55.45 26	ET 4	48.61	37.I
28		31.2	61.27 25	17.3	55.71	50.4	49.02 41	34.4
Sept. 7	13 70	30.6	61.55	16.4	56.00	49.3	10.52	22 T
17		29.9	61.85	15.6	56.31	18.2	50 14	20.2
27	40	29.1	62.16	11.7	56.65	17.3	50.81	200 '3
Okt. 7	14.63	28.2	62.50 34	12.8	57.00 35	16.2	ET 54 13	28.4
17	5-4	27.3	62.85 35	12.8	57.37	45.3	52.30	28.4
	35		60.00 35	9	37	9	76	6
Nov. 6	35	- 4	63.20 63.56		- 8 TO	44.4 8	53.06 53.81 75	20.0
16	1 2 34	25.4	63.92	0	58.50		53.81 70	
26	31		6426		r 8 86 3	43.0	54.51 62	32.3 25
Dez. 6		23.7 8 22.9	64.58 31	9.0	59.20	42.I 3	55.13	37.8
	20	5	26) 4	3	1	4-	54
16	20	22.4	64.87	8.6	59.51	42.0	56.09	41.2 36
26	20	22.0	05.13	8.4	59.78		56.39 10	44.8 39
36	17.39	21.7	65.33	8.4	60.00	42.4	56.55	48.7
Mittl, Ort	11.85	26.8	59.67	13.8	54.00	48.3	53.72	50.2
sec 8, tg 8	_	+0.458	1	+0.537	1	-1 0.665		-3.152
7 70 4		, ,,,,	1 -7-33	• 5.55/	1 -1702		1 2.2.1	J J.

	300) Gr	. 1374.	303) χ	Argus.	305) χ Ger	ainorum.	306) \$ 1	Argus.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.
	7 ^h 49 ^m	74° 8′	7 th 54 th	52° 44′	7 ^h 58 ^m	28° 2′	8 ^h o ^m	39° 45′
Jan. o	53.62 45	68.1	35.75	42.2	12.12	23.8	32.88	16.0
10	54.07 28	70.6	35.89 6	45.9	12.32	23.8	33.02	19.4
20	54.35 12	73.3 28	35.95 2	49.0 36	12.46	24.0	33.11	22.8
30	54.47 -5	76.1 27	35.93	53.2 33	12.55	24.4	33.14	20.1
Febr. 9	54.42	78.8	35.84	56.5	12.59	24.9	33.10	29.1
19	54.20 36	81.4	35.69 22	59.5 27	12.57	25.5 7	33.01	31.8 24
März 1	53.84	83.7	35.47 25	62.2	12.50	20.2	32.88	34.2
11	53.30	85.7 16	35.22	64.4 18	12.39	26.9 6	32.70 21	36.1 16
21	52.79 64	87.3 11	34.92	66.2	12.25 16	27.5 6	32.49	37.7 11
31	52.15 67	88.4 6	34.60 33	67.4	12.09	28.1	32.26	38.8 6
April 10	51.48	89.0	34.27	68.2	11.92	28.5	32.02	39.4 2
20	50.81 64	89.1	33.93	68.5	11.75	28.9	31.78	39.6
30	50.17	88.6	33.61	08.2	11.59	29.1	31.55	39.3
Mai 10	49.50	07.0	33.31	67.5	11.46	29.1	31.34 19	38.6
2 0	49.08	86.T	33.04	66.2	11.35	29.1	31.15	37.5
30	48.68	84.3 22	32.81	64.6	11.27	28.9	30.99	35.9 19
Juni 9	48.39	82.1	32.61	62.5	11.23	28.5	30.87 8	34.0 21
19	48.22	79.6	32.47	60.I	11.23	28.1	30.79	31.9 25
29	40.10 n	76.9 28	32.38	57.4 29	11.20	27.7 6	30.74	29.4 2
Juli 9	48.27	74.I 32	32.34	54.5	11.33	27.1	30.74	26.8
19	48.51	70.9 29	32.35	51.5	11.44	26.5 7	30.78	24.1
29	48.86 35	68.0	32.44	48.2 33	11.60	25.8 8	30.86	21.1 26
Aug. 8	49.33 58	65.1 27	32.57	45.2 28	11.78	25.0 8	30.98	18.5 25
18	49.91 68	62.4 26	32.76	42.4 25	11.99	24.2	31.15 20	10.0
28	50.59	59.8	33.00	39.9	12.22	23.4	31.35	13.8
Sept. 7	51.35 84	57.5 1	33.29	37.8	12.48	22.5	31.59 28	11.9
17	52.19	55.4 17	33.62 33	36.1	12.77	21.5	31.87 30	10.5
27	53.10 06	FO 77	33 99 40	34.9 5	13.08	20.5	32.17 33	9.6
Okt. 7	54.06	52.3	34.39	34.4	13.41	19.4	32.50	9.3 2
17	55.06	51.2	34.81	34.5	13.75	18.3	32.85 36	9.5
27	56.08	50.6	35.24	35.2	14.11 36	17.2	33.21 36	10.3
Nov. 6	57.10	50.5	35.67	36.6	14.47 26	16.2 10	33.57 36	11.7 20
16	58.09 95	50.8	36.08	38.6	14.83	15.2 9	33.93	13.7 24
26	59.04 80	51.6	36.47	41.1	15.18 35	14.3	34.27 34	16.1 28
Dez. 6	59·93 ₇₈	52.8	36.82	44.1 33	15.51 31	13.6	34.59	18.9
16	60.71 67	54.5 20	27.12	47.4 36	15.82	13.1	34.87	22.I
26	61.38	56.5 25	37.36 24	51.0	16.09 27	12.7	35.10 23	25.5 24
36	61.90	59.0	37.53	54.7	16.32	12.6	35.29	28.9
Mittl. Ort	48.22	66.8	34.05	54.6	10.65	20.6	31.53	27.3
sec 8, tg 8	3.662	+ 3.523	1.652	-1.315	T.133	+0.533	1.301	0.832

	307) 27	Lyncis.	308) t	Navis.	309) Y	Argus.	310) Br	. 1147.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	8 ^h 1 ^m	51° 45′	8h 3m	21" 2'	8 ^h 6 ⁿ	47° 4′	8h 8m	76° 1'
Jan. o	57.41 26	31.3	51.46	61.2	52.51	34.8	44.64 56	26.1
10	57.67	32.7	51.62	64.1 28	52.66	38.5 36	45.20 28	
20	57.87	34.3	51.73 6	66.9 26	52.75 2	42.1	45.58	31.3 28
30	57.98	36.1	51.79	69.5	52.77	45.0	45.77	34.1 28
Febr. 9	58.02 4	37.9	51.80 -	71.9	52.72	40.0	45.77	36.9 28
19	57.98 11	39.7	51.76	74.1 18	52.62 16	51.8 26	45.59 36	39.7 25
März 1	57.87 17	41.4 16	51.67	75.9 14	52.46	54.4 23	45.23 50	
11 21	57.70 21	43.0	51.54 16	77.3	52.25	56.7	44.73 62	160
31	57.49 25 57.24	44.3	51.38 51.21	78.5 79.2	52.01 ²⁷ 51.74	58.4	44.11 70	47.5
	20	45.3	19	4	28	ð	75	0
April 10	56.98 26	46.0	51.02 18	79.6	51.46 28	60.6	42.66	48.4 2
20 30	56.72 25 56.47 22	46.3	ro 66	79.6	51.18 27 50.91	60.9	41.89 75	
Mai 10	1601	45.9	50.50	79.3 7 78.6 7	50.65	60.2	10.11	17.5
20	56.07	45.2	50.36	77.6	50.42	59.1	39.82	46.2
20	14	11	TO 24	76.3	50.22	15	5	17
Juni 9	55.93 9	44.I 42.8	50.24 8	74.7	50.05	57.6	39.30	142 4
19	55.80 4	41.3	50.12	73.0	40.02	55.7 22 53.5 26	28 62	20.0
29	55.82 2	206	50.11	71.0	40.85	50.0	38.50	07 0
Juli 9	55.89	37.8	50.13	68.9	49.82	48.2	38.51	34.4
19	56.02	25.8	50.19	66.8	49.84	45.4	38.67	21.4
29	56.21	33.7	50.20	64.4	22/10.01 7	12.2	23 30.00 3	28.0
Aug. 8	56 44 23	21.6	50.11	62.3 18	50.03	20.2	30.41	25.0
18	56.72	29.6	50.61	60.5	50.20 21	36.6 27	40.01 6	220
28	57.03	27.7	50.80	58.8	50.41	34.2	40.70 80	10.2
Sept. 7	57.39 30	25.8	51.03	57.5	50.66	32.1	ATTO	16.6
17	57.78 39	24.1 16	51.28 25	56.6	50.96 30	30.5	42.40 9	
27	58.19 45	22.5	51.55 20	56.0	51.29 33	29.4 6	43.38 10.	12.2
Okt. 7	50.04	21.0	51.84	56.0	51.05 37	20.0	44.42	100
17	59.11	19.8	52.15	56.4	52.02	28.9	45.52	9.3
27	59.59 50	18.8	52.47 32	57.4	52.42	29.6	46.65	84
Nov. 6	60.09	18.0	52.79	58.8	52.82	30.9	47.80	7.9
16	00.50	17.6	53.11	00.7	1 53.41 27	32.0 24	48.93 10	8.0
1)07 6	01.05	17.5	53.42	62.9 26	55.20 34	35.2 28	50.01	8.5 11
Dez. 6	61.50	17.8	53.71 26	65.5	53.92	38.0	51.03	
16	61.91 26	18.4	53.97 23	68.3 28	54.22	41.3	51.95 8	77.7
26	62.27 30	19.3	54.20 18	71.1	54.46	44.0 26	52.75 6	13.1 2
36	62.57	20.5	54.38	74.1	54.65	48.4	53.40	15.3
Mittl. Ort	55.16	30.3	50.31	70.6	51.05	47.2	38.50	26.6
sec ò, tg ò	1.616	+1.269	1.095	-0.446	1.469	-1.075	4.141	+4.019

	311) 20	Navis.	312) B	Cancri.	314) 31	Lyncis.	315) E	\rgus.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	8 ^h 9 ^m	15° 31'	8, 11 _m	9° 27′	8 ^h 16 ^m	43* 27'	8h 20m	59° 13′
Jan. o	21.18	23.5 26	49.11	20.4	54.92 26	65.3 8	45.61 18	30.7 38
10	21.34	26.1	49.30	19.3 10	55.18 19	66.1	45.79 10	34.5 28
20	21.46	28.5	49.44	18.3	55.37	67.2	45.89	38.3 38
30	21.53 2	30.7 20	49.53	17.5 6	55.50 6	68.5	45.89 7	42.1 36
Febr. 9	21.55	32.7	49.57	16.9	55.56 -	69.9	45.82	45.7
19	21.52 8	34.5	49.56	16.4	55.55 8	71.3	45.66 22	49.0
März 1	21.44	36.0	49.51	16.2	55.47 12	72.8	45.44 29	52.0 27
II	21.34	37.1	49.42	16.1	55.35 16	74.1	45.15 22	54.7 22
21	21.20 16	38.0	49.30	16.1	55.19 19	75.3 10	44.82 37	56.9 17
31	21.04	38.6	49.16	16.3	55.00	76.3	44.45 38	58.6
April 10	20.88	38.9	40.0I	16.5	54.79 22	77.1	44.07 40	59.8 7
20	20.71	38.8	48.86	16.8	54.57 20	77.5 4	43.67 40	60.5
30	20.56	38.5 6	48.72	17.1	54.37	77.7	43.27 37	60.7
Mai 10	20.42	37.9	48.60	17.5	54.19 16	77.6	42.90 36	60.4
20	20.30	37.0	48.50	17.9	54.03	77.3	42.54	59.5
30	20.20	35.9	48.42	18.3	53.91 8	76.6	42.22 28	58.1
Juni 9	20.14	24.6	48.38	18.8	53.83	75.7	41.04	564
19	20.10	22 T	18.36	19.3	52 70 T	74.6	41.72 18	54.2
29	20.10	21.5	48.38	19.8	53.80 6	73.3	41.54	51.7 28
Juli 9	20.13	29.8	48.43	20.2	53.86	71.9	41.43	48.9
19	20.20	28.1	48.51	20.7	52.06	70.4	41.38	30
29	2320.30	26 T	48.64	21.1	20 CA TO	68.7	26 41.41 3	45.9 34
Aug. 8	20.43	24.5	48.78	21.4	54.30	67.0	41.50	3
18	20.59	23.0	48.95	21.5	EA E2	600	41.65	39.5
28	20.78	21.7	49.15	21.6	54.78	63.5	41.88 23	33.8
	21	10	22	2	29	17	29	24
Sept. 7	20.99 24	20.7 6	49.37 25	21.4	55.07 32	61.8 16	42.17 34	31.4 20
17	21.23 26	20.I	49.62 27	21.1 6	55.39 35	60.2 16	42.51 40	29.4
Okt. 7	21.49	19.8	49.89 28	20.5	55.74 38	58.6	42.91 44	27.9
	21.78	19.9 6	50.17	19.8	56.12 40	57.1	43.35 47	27.0
17	22.08	20.5	50.48	12	56.52	55.7	43.82 49	26.7
27	22.39 32	21.5	50.80	17.6	56.94 43	54.4 10	44.31	27.1
Nov. 6	22.71	22.9	51.12	16.3	57-37	53.4 8	44.81	28.1
16	23.03	24.7	51.45 32	14.8	57.80	52.6	45.30	29.8
26	23.34 20	26.8	51.77	13.3	58.22	52.1	45.77	32.1
Dez. 6	23.63	29.1	52.08 3	11.8	58.63	51.8	46.19	34.8
16	23.00	31.6 26	52.36	10.3	50.01	51.0	46.56	38.0
2 6	24.13	34.2 26	52.61	8.9	TO 24 32	52.2	46.86 23	41.6
36	24.33	36.8	52.82	7.6	59.63	52.9	47.09	45.3
Mittl. Ort	20.06	31.9	47.91	15.6	53.07	64.8	43.81	45.0
sec 8, tg 8		-0.278		-+-0.167		+0.948		-1.680

	31 6) Br	. 1197.	317) o Ur	sae maj.	318) 0 C	hamael.	320) Gr.	1450.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	8 ^h 21 ^m	3° 37'	8 ^h 23 ^m	61° 0′	8 ^h 23 ^m	77° 11′	8h 27m	38" 18'
Jan. o	19.94	12.6	5.74 35	34.7	20.16	59.0	17.56	56.3 5
10	20.13	14.5	6.09 26	36.4	20.42	62.7 37	17.81	50.8 7
20	20.27	16.3 16	6.35	38.4 22	20.48	66.6 38	18.01	57.5 o
Febr. 9	20.36	17.9	6.52 6	40.6	20.35	70.4	18.14 7	58.4 10
rebr. 9	20.40	19.3	6.58	42.9	2 0.04 47	74.1	18.21	59.4
19	20.40	20.5 10	6.55	45.I ₂₂	19.57 63	77.6	18.21	60.7 13
März I	20.35	21.5 6	6.43	47.3 20	18.94 75	00.0	18.16	62.0 12
11 21	20.26	22.1	6.24 27	49.3	18.19 87	83.7 86.2 25	18.06	64.3
31	20.14	22.9 3	5.97 5.66	51.0 52.3	17.32 16.38 94	88.2	17.92 16 17.76	65.3
	15	0	33	10	100	15	19	7
April 10	19.85	22.9	5.33 35	53.3 5	15.38 103	89.7 10	17.57 19	66.6
30	19.71	22.4	4.98 34	53.8	14.35 103 13.32 101	90.7	17.38 19	66.9 3
Mai 10	10.44	22.0	100 31	53·9 4 53·5 7	12 21	OLT	17.02	66.0
20	19.33	21.3	4.05	52.8	11.35	90.5	16.88	66.7
30	10.21	20.6	3.82	51.6	10.46	89.4 16	16 ==	66 2 4
Juni 9	19.24 6	10.7	265	50.T	0.62	87.8	16.69	65.7
19	10.16	18.7	3.54	18.2	8.93	0 0	16.65 4	64.8
29	10.16	17.6	3.50	46.2 23	8.35 45	83.4 27	16.65	63.8
Juli 9	19.19	16.5	3.53	43.9	7.90 29	80.7	16.70 8	62.7
19	19.26	15.4	3.62	41.5	7.61	77.8	16.78	61.4
29	19.36	14.2	3.80	38.8 27	7.48 5	74.4 34	27 16.91 16	60,0
Aug. 8	19.48	13.1 8	4.03 29	36.3	7.53 22	71.2 31	17.07 20	58.5 15
18	19.63	12.3	4.32 35	33.8	7.75 20	68.1	17.27 23	57.0 15
28	19.81	11.6	4.07	31.3	8.14 54	65.2 26	17.50 26	55.5 16
Sept. 7	20.02	11.2	5.08	28.8	8.68 69	62.6	17.76 29	53.9 16
17	20.25	11.0	5.53 49	26.6	9.37 81	60.4 .8	18.05	52.3 15
Ol-t 27	20.51	11.1	0.02	24.5 18	10.18 91	58.6	18.37 25	50.8
Okt. 7	20.78 21.08	11.6 7	6.55 57	22.7 15	11.09 98	57.4 5	18.72 37	49.3 15
	31	12.3	7.12 60	13	12.07	56.9	19.09 38	47.8
N 27	21.39 31	13.4	7.72 60	19.9 9	13.09 102	57.0 7	19.47 40	46.4 12
Nov. 6	21.70	14.8	8.32 61	19.0	14.11 99	57.7 14	19.07 41	45.2 10
16 2 6	22.02 32 22.31 30	16.5 18	8.93 60 9.53 66	18.5	15.10 92	6 T T	20.28 40	44.2 8
Dez. 6	22.64 30	20.3	10.09	18.8	16.84	62.7	21.07 39	43.4 6
	28	21	10.62	7	68	66.8	30	3
16 2 6	22.92 23.16	22.4	IT 08 40	19.5 20.7	17.52 18.05	70.2 34	21.43 32	42.5 0
36	23.37	24.5 26.5	11.48 40	22.3	18.40 35	73.8 36	21.75 ₂₈ 22.03	42.8
Mittl. Ort	18.85	19.1	2.80	36.0	16.08	74.9	15.89	56.0
sec 8, tg 8	1.002	-0.063	2.063	+1.805	4.516	-4.404		+0.790

	321) η (Cancri.	326) 8 (Janeri.	327) a l	yxidis.	328) i C	ancri.
1913	AR.	Dekl. -t-	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	8 ^h 27 ^m	20° 44′	8 ^h 39 ^m	18° 28′	8" 40"	32° 52'	8 ^h 41 ^m	29° 4′
Jan. o	42.10	17.3 6	45.83	31.3 8	6.82	8.6	27.56	44.3 ₁
10	42.32	16.7	46.05 18	30.5	7.01	12.0	27.81 19	44.2 I
20	42.49 11	10.3	46.23	30.0	7.16 8	15.2	28.00	44.3 4
Febr. 9	42.60 42.67	16.1	46.36	29.7	7.24	18.3 29	28.14 8	44.7 5
F 601. 9	1	2	46.43	29.6	7.27 =	21.2	2	45.2
19	42.68	16.4	46.45 -	29.6	7.25	23.9 24	28.24 -	45.9 8
März 1	42.64 8	16.7 5	46.43	29.9	7.18	26.3	28.22 8	46.7 8
II	42.56	17.2 5	46.36	30.2	7.06	28.4 16	28.14	47.5 9
21	42.44	17.7	46.25 46.12	30.6	6.91	30.0		48.4 8
31	42.30	5	14	31.1	6.73	31.3	27.89 16	49.2
April 10	42.16	18.7	45.98	31.5	6.54 19	32.2	27.73 16	49.9 6
20	42.00	19.1	45.83	31.9	6.35 20	32.7 o	27.57 16	50.5 4
30 Mai 30	41.85	19.4	45.69	32.3 4	6.15 19	32.7	27.41	50.9 2
Mai 10	41.72	19.7	45.56	32.7	5.96 16	32.4 8	27.26	51.1
20	41.61	19.9	45.44	33.0	5.80	31.6	27.13	51.2
30	41.52	20.I	45.35 6	33.2	5.65	30.5	27.03 7	51.2 2
Juni 9	41.47 3	20.1	45.29	33.3	5.53	29.1	20.90	51.0 4
19	41.44	20.I	45.26	33.4	5.44 6	27.3 20	20.92	50.6
1 1	41.45	20.0	45.25	33.4	5.38	25.3 22	26.92	50.1 6
Juli 9	41.49	19.8	45.28 6	33.3	5.36	23.I	26.94	49.5 8
19	41.56	19.6	45.34	33.2	5.37 5	20.8	27.01	48.7 8
29	41.68	19.2	45.43	32.9 3	5.42 9	18.5 26	27.10	47.9 11
Aug. 8	41.82	18.8	45.57 15	32.6	5.51	15.9	27.24 17	46.8 10
18	41.99	18.3 6	45.72	32.1	5.63 16	13.6	27.41 19	45.8 12
28	42.18	17.7	45.90	31.6	5.79	11.6	27.60	44.6
Sept. 7	42.41	T6.0	46.11	30.9	5.99 23	9.8	27.83 25	43.4 13
17	42.65 28	Th T	46.35 26	200	6.22 26	8.5	28.08	12 T
27	42.93 29	15.1	46.61	20.0	6.48	7.5	28.36	40.7 15
Okt. 7	43.22	12.0	46.89 31	27.9	0.78	7.1	28.07 33	39.2
17	43.54	12.7	47.20	20.0	7.09	7.I	29.00 35	37.8
27	43.87	11.4	47.53	25.2	7.43	7.8	29.35 36	2/12
Nov. 6	44.21 34	10.1	47.86 33	22.8	7.78 35	8.9	29.71	34.0
16	44.56 35	8.7	48.21 24	22.3	8.13 35	10.6	30.08 37	33.5
26	44.91	7.4	40.55	200	0.40	12.8 26	30.45 26	22.4
Dez. 6	45.24 31	6.2	48.89 31	19.5	8.81 33	15.4	30.81	31.4
16	45.55 28	5 T	40.20	18.2	0.11	18.3	31.15	30.5
2 6	45.83	12	49.49 24	T7.T	9.38 27	21.4	31.46 31	20.0
36	46.08	3.5	49.73	16.2	9.60	24.6 32	31.73	29.7
Mittl, Ort	40.81	14.6	44.59	28.9	5.75	20.1	26.15	43.8
sec 8, tg 8	1.069	-⊦0.379	1.054	-1-0.334	1.191	-0.646	1.144	+0.556
			-					

33.0	330) 8	Argus.	334) \$ I	lydrae.	336) c (Carinae.	335) ı Urs	sae maj.
1913	AR.	Dekl,	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	8h 42m	54° 23'	8 ^h 50 ^m	6° 16′	8 ^h 53 ^m	60° 18′	8 ^h 53 ^m	48° 22'
Jan. o	19.51 22	7.4	48.85	42.2	6.16	26.5 38	17.45	59.4 8
10	19.73	11.2	49.07 18	40.7	6.41 25	30.3 38	17.76 31	60.2
20	19.86	14.9 37	49.25	39.4	6.58	34.1	18.02	CI.4
30	19.92	18.7 36	49.37 8	38.3	6.65	38.0	18.20	62.8
Febr. 9	1991 8	22.3	49.45	37.4	6.64	41.7	18.31	64.4
19	19.83	25.7	49.47	36.7	6.54	45.3	18.34	66.2
März 1	19.67	28.8 31	49.45 6	36.3	6.37	48.6 33	18.30	68.0
11	19.47 26	31.6	49.39	36.0	6.13	51.0 26	18.21	69.7
21	19.21	33.9	49.30	35.9	5.83	54.2	18.06	71.3
31	18.92	35.8	49.18	36.0	5.49	56.3	17.87	72.7
April 10	18.61	37.3	49.05	36.I	5.12	58.0	17.66	73.8 8
20	18.28 33	38.2	48.91	36.4	4.73	59.2 6	17.43	74.6
30	17.96 32	$38.6 - \frac{4}{1}$	48.78	36.8	4.34 39	59.8	17.20 22	75.1
Mai 10	17.64 30	38.5	48.65	37.2 4	3.95 38	59.9	16.98	75.2
20	17.34	37.9	48.54	37.0	3.57	59.6	16.78	75.0
30	17.07	36.8	48.45	38.1 6	3.23	58.7	16.62	74.5
Juni 9	16.82 20	35.3 20	48.38	38.7	2.91	57.3 18	16.49	73.6
19	16.62	33.3 23	48.34	39.2 5	2.64 27	55.5 22	16.40	72.5
29	16.47	31.0	48.33	39.8	2.42	53.3 26	16.36	71.1
Juli 9	16.36	28.4	48.34	40.4	2.25	50.7 28	16.36	69.5
19	16.30	25.7	48.38	40.9	2.15	47.0	16.41	67.7
29	16.30	22.7	48.46	41.4	2.11 4	45.0	16.50	65.8
Aug. 8	16.37	19.5	248.57	41.8	2.14	41.7	316.65 18	62.5
18	16.49 18	16.6	48.70 16	42.0 2	2.24	38.7 30	16.83	61.4
28	16.67	13.9 27	48.86	42.I —	2.41	35.8	17.05	59.2
Sept. 7	16.90	11.5	49.05	42.0	2.66	23.2	17.32	57.0
17	17.19	0.4	10.26	47 7 3	2 06 30	210	17.62	54.0
27	1752 34	7.0	10.50	41.1 8	3.34 30	20.2	TH OF 35	F28 -
Okt. 7	17.01 30	6.8	40.77	40.3	3.76	27.0	18.35	50.8
17	18.33	6.4	50.06	39.3	4.23	27.2	18.76	48.9
27	18.77	6.6	50.36	38.0	4.72	27.2	19.19	47.2
Nov. 6	70 22 45	7.5	50.68	26 5 13	5.21	27.0	10 64 45	15 8
16	19.68	0.0	5 T.OT 33	34.0	r 76 3"	20 2 13	20.10	44.6
26	20.12	TTT	ET 24 33	33.2 18	6 26	01 7	20.57	43.8
Dez. 6	20.53	13.7	51.66	31.4	6.74	33.6	21.02	43.3
16	20.90	16.8	31	20.6	7.16	36.5	21.45	122
26	21.22	20.2 39	5225	270	7.52 3/	30.0	21.81	12.5
36	21.47 25	23.9 37	52.49	26.3	7.82	43.6 37	22.19 35	44.1
Mittl. Ort	18.08	22.2	47.78	38.1	4.62	42.4	15.46	62.2
sec 5, tg 5	1.718	-1.396	1	+0.110	2.019	- r.754		-1-0.126

Jan. 0 10 20	AR. 8 ^h 53 ^m 44.98 45.21 18 45.39 14	Dekl. + 12° 11' 45.3 12 44.1 10	AR. 8 ^h 54 ^m 61.60	Dekl. + 42° 7'	AR. 8 ^h 57 ⁿ	Dekl.	AR.	Dekl.
10 20	44.98 45.21 18 45.39 14	45.3 ₁₂	61.60	42° 7′	Qhn			
10 20	45.21 18 45.39 14	44.1	61.60		0 57	47° 29'	9h 1m	66° 2'
20	45.21 ₁₈ 45.39 ₁₄	44.T	20	38.2	43.46	61.6	6.33 29	38.4
	45.39 14		61.90	38.8	43.79 25	62.4	6.62	42.1
	15 50 14	43.I	62.14	39.6	44.04 19	63.5	6.81	46.0 39
30	45.53 8	42.4 6	62.31	40.6	44.23	64.9 16	6.90	49.9
Febr. 9	45.61	41.8	62.41	41.9	44.35	66.5	6.88	53.7
19	45.64 -	41.5	$62.45 \frac{4}{3}$	43.3	44.39	68.2	6.76	57.4
März 1	45.63 6	41.4	62.42 8	44.8	44.36	69.9	6.54 20	60.9 3
11	45.57	41.4	62.34	46.3	44.27	71.6	6.25 36	64.1
21	45.48	41.6	62.22	47.7	44.13	73.2	5.89 42	66.9
31	45.36	41.9	62.05	48.9	43.96	74.6	5.47	69.2
April 10	45.23	42.2	61.87	50.0	43.75	75.7	5.01	71.1
20	45.00	42.6	61.67	50.7 6	13.53	76.6	4.53	72.5
30	44.05	43.0	61.47	51.2	12.21	77.1 5	4.03	73.4
Mai 10	44.82	43.4	61.28	$51.5 \frac{2}{1}$	43.00	77.3	254 49	73.7
20	44.71	43.8	61.11	51.4	42.90	77.2	3.06	73.5
30	44.62	44.2	60.97	5 I. I	42.74	76.7	2.61	72.8
Juni 9	44.55	44.5	60.86	504 7	42.61	75.0	2.19 42	71.6
19	44.51	44.9	60.79	10.6	42.52	74.9	1.82 37	69.9
29	44.40	45.2	60.76	18.4	12.47	73.5	1.51 31	67.8 2
Juli 9	44.51	45.4	60.76	47.I	42.47	72.0	1.27	65.3
	4	2	60.81	14	4	17	18	62.6
19	44-55 8	45.6	0	45.7 16	42.51 8	70.3 68.4	1.09 9	2
Aug. 29	44.63	45.7	60.90	44.1	42.59 14	66.2	1.00	56.2
18	44.87	45.8	61.21	42.2 19	42.73 18	21	1.08 9	
28	11	45.7	61.41	40.3 38.4	42.91	64.1	17	53.2
	45.04 19	45.4	24	19	43.13	21	1.25 26	2
Sept. 7	45.23 21	44.9 6	61.65 28	36.5 19	43.38 30	59.8	1.51	47.5
17	45.44 25	44.3 8	61.93	34.6 20	43.00	57.6	1.80	45.1
27	45.69 27	43.5 ₁₀	02.24	32.6	44.01	55.4 20	2.28	43.2
Okt. 7	45.96 29	42.5	02.50	30.7 18	44.30	53.4 19	2.77 55	41.7
17	46.25	41.3	62.95	28.9	44.78	51.5	3.32 58	40.9
27	46.56	30.0	63.31	27.2	45.21	40.8	3.90 61	40.7
Nov. 6	46.89 33	38.4	63.76	25.8	45.66	48.3 15	4.51 61	41.1
16	47.22 33	26.0	64.18	215 3	46.11 45	47.I	5.12 60	42.2
26	47.56	33.4	04.01	225	40.57	46.2 6	5.72 56	44.0
Dez. 6	47.89	33.6	65.02	22.8	47.02	45.6	6.28	46.3
16	48.20	22.0	65.41 36	22.4	47.45	45.4	6.78 43	49.2
26	48.49 25	30.5	65.77	22.3	47.85 40	45.6	771	
36	48.74	29.2	66.09 32	22.7	48.19 34	46.2	7.56 35	56.1
Mittl. Ort	43.85	42.4	59.88	40.4	41.53	64.7	4.56	55.3
sec 8, tg 8	1.023		4.	10.904			2.464	

	01.	171117	IK O IJIII	111111	101(1)	131(131)		
	344) o² l'i	sac maj.	345) À.	Argus.	347) 9 I	lydrae.	348) ß	Argus.
1913	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.
	9 ^h 2 ^m	67° 28′	9 ^h 4 ^m	43° 4'	9 ¹ 9 ^m	2° 40'	9h 12m	69" 21'
Jan. 0 20 30 Febr. 9 März 1 11 21 31 April 10 20 Mai 10 20	48.93 50 49.43 40 49.83 28 50.11 17 50.28 3 50.23 18 50.05 28 49.77 35 49.42 41 48.58 45 48.13 44 47.69 44 47.29	74.0 17 75.7 20 77.7 24 80.1 24 82.6 25 87.7 24 90.1 21 92.2 19 94.1 14 95.5 10 96.5 5 97.0 0 96.5 5	48.69 48.92 49.09 49.21 49.25 1 49.24 7 49.17 12 49.05 16 48.89 19 48.70 21 48.49 23 48.26 23 48.03 23 47.80 22 47.58	37.4 34 40.8 34 44.4 35 47.9 34 51.3 32 54.5 29 57.4 26 60.0 23 64.1 14 65.5 9 66.4 5 66.9 66.5	51.33 23 51.56 19 51.75 15 51.90 9 51.99 4 52.03 0 52.03 4 51.91 11 51.80 12 51.68 13 51.55 14 51.41 12 51.29 11	58.9 17 57.2 16 55.6 14 54.2 11 53.1 10 52.1 7 51.4 5 50.6 3 50.6 2 50.6 2 50.8 3 51.1 4 51.5 4	16.86 17.21 35 17.44 11 17.55 0 17.55 12 17.43 23 17.20 32 16.88 40 16.01 47 16.01 52 15.49 55 14.94 58 14.36 58 13.78 56 13.22	13.6 17.3 37 21.2 39 25.1 39 29.0 38 36.4 33 39.7 29 42.6 20 45.2 21 47.3 16 48.9 10 49.9 6 50.5 0 50.5
Juni 9 19 29 Juli 9	46.93 46.62 46.38 46.21 46.12	95.5 94.1 94.1 18 92.3 21 90.2 87.8	19 47·39 47·21 47·07 14 46·96 46.88	65.6 64.3 62.7 60.7 58.4	51.08 8 51.00 5 50.95 3 50.92 0	52.5 6 53.1 6 53.7 7 54.4 7 55.1	12.67 50 12.17 46 11.71 39 11.32 32	50.0 11 48.9 15 47.4 20 45.4 23 43.1
19 29 Aug. 8 18 28	46.12 8 46.20 18 46.38 46.62 24 46.95 33	85.2 28 82.4 33 79.1 30 76.1 29 73.2 29	46.84 46.84 646.90 46.99 47.13	56.0 26 53.4 29 50.5 26 47.9 25 45.4 21	50.95 51.00 51.09 11 51.20 14 51.34	55.8 6 56.4 6 57.0 4 57.4 2 57.6 0	10.75 16 10.59 5 10.54 6 10.60 15 10.75 27	40.4 29 37.5 30 34.5 34 31.1 30 28.1 28
Sept. 7 17 27 Okt. 7	47.35 47.82 47.83 48.36 48.95	70.3 ₂₈ 67.5 ₂₇ 64.8 ²⁴ 62.4	47.31 ₂₂ 47.53 ₂₇ 47.80 ₃₀ 48.10 ₃₅	43·3 ₁₉ 41.4 ₁₄ 40.0 ₉ 39.1	51.51 20 51.71 22 51.93 26 52.19 27	57.6 2 57.4 4 57.0 7 56.3 10	11.02 11.38 11.81 12.36 61	25.3 25 22.8 22 20.6 16 19.0 10
Nov. 6	49.60 69 50.29 72 51.01 75 51.76 74	58.6 57.2 56.2	48.45 48.81 38 49.19 39 49.58	38.7 $\frac{4}{3}$ 39.0 $\frac{8}{3}$ 39.8 $\frac{14}{41.2}$	52.46 52.76 53.08 53.41	55.3 54.0 52.5 50.8	12.97 65 13.62 69 14.31 69 15.00 68	18.0 17.6 17.8 18.7 16
Dez. 6 16 26 36	52.50 74 53.22 69 53.91 62 54.53 55 55.08	55.7 55.7 56.2 57.2 58.7	49.97 37 50.34 35 50.69 31 51.00 26 51.26	43.2 24 45.6 29 48.5 32 51.7 34	53.74 32 54.06 32 54.38 28 54.66 26 54.92	48.9 19 47.0 20 45.0 19 43.1 18 41.3	15.68 64 16.32 58 16.90 50 17.40 41 17.81	20.3 22 22.5 27 25.2 32 28.4 35 31.9
Mittl. Ort	45.28 2.612	79·3 -1-2.413	47.66	51.1 0.935	50.35	54.6 -1-0.017	15.00	31.3 -2.655

	350) 83	Cancri.	352) 40	Lyncis.	353) z	Argus.	354) α I	lydrae.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	9 ^h 14 ^m	18° 4′	9 ^h 15 ^m	34° 45′	9 ^h 19 tm	54° 38′	9 ^h 23 ^m	8° 16'
Jan. o	8.81	29.9	46.99	37. 2 °	26.21	3.5 ₃₆	19.62	45.2 23
10	9.07	28.9	47.28	37.2	26.48	7.1 ₃₈	19.86	47.5 22
20	9.28 16	28.2	47.52 18	37.4 6	26.69	10.9 38	20.06	49.7 20
30	9.44	27.8	47.70	38.0 8	20.82	14.7 37	20.21	51.7 18
Febr. 9	9.55 6	27.6	47.83	38.8	26.88	18.4	20.31	53.5
19	9.61	27.6	47.89	39.8	26.86	22.0	20.36	55.1 14
März 1	9.61	27.8	47.89	41.0	26.77	25.3	20.36	56.5 11
11	9.57 8	28.1	47.85	42.2	26.62	28.4 27	20.33 8	57.6 8
21	9.49 10	28.0	47.75 12	43.5	26.41	31.1	20.25 10	58.4 6
31	9.39	29.1	47.63	44.6	26.17	33.4	20.15	59.0
April 10	9.26	20.7	47.48	45.6	25.89	35.3	20.03	59.3 2
20	0.12	30.2	47.31	46.5	25.60	36.7 8	19.90 14	59.5
30	8.99	30.7 5	47.14 16	47.2	25.20	37.5	10.70	59.4
Mai 10	8.86	31.2	46.08	47.6 4	24.98 31	37.9	19.63	59.I 3
20	8.73	31.6	46.83	47.8	24.68 30	37.8	19.51	58.6
30	8.63	31.9	46.70	47.7	2.1.40	27.2	19.41	57.9 8
Juni 9	8.55	32.I	46.60	47.5	24.13	36.1	10.32	57.1
19	8.50	32.2	46.53	47.0	22.00	31.6	19.25	56.2
29	8.47	32.2	46.48	46.3	22.71	32.6	10.21	55.1
Juli 9	8.47	32.2	46.47	45.4	23.56	30.4 26	19.19 -	54.0
19	8.50	32.0	46.50	44.4	23.46	27.8	19.20	52.9
29	8.55 8	31.8	46.56	43.2	23.40	25.I 2/	19.23	51.7
Aug. 8	8.63	214	46.65	41.8 14	23.40	22.2	10.20	50.6
18	8.76	30.8	46.79	10.2	1023.47	19.0 32	10.40	49.5
28	8.91	30.1	46.96	38.6	23.59	16.3 27	19.51	48.6
Sept. 7	18	29.3	20	36.9	18	72 7	19.66	48.0
17	9.09 20	28.4	47.16	_ 10	23.77 24.02	13.7	19.85	3
27	9.52	27.2	47.39 26	35.1	24.02 30	9.6	20.06	47.6
Okt. 7	9.79 27	1.5	47.95 30	33.3 19	21 60 30	9 0 13	20.30 24	170
17	10.08 29	25.9 24.5	48.27	29.6	25.06 38	7.5	20.57	48.5
·	31	16	35	18	43	2	29	10
Nov. 6	10.39	22.9 16	48.62 38	27.8	25.49 45	7.3 4	20.86	49.5
Nov. 6	10.71	21.3	49.00	26.1	25.94	7.7	21.17	50.9 16
	11.00	19.6	49.39 20	24.5	20.41	8.8	21.50	52.5 20
Dez. 6	11.41	18.0 16	49.70	23.1	20.00	10.5	21.03 32	54.5 21
	11.75	16.4	50.17 37	22.0	27.32	12.8	22.15	56.6
16	12.08	14.9	50.54 25	21.1 6	27.74 37	15.6	22.47 20	58.9 2
26	12.39 28	13.6	50.89	20.5	28.11	10.0	22.70 26	61.2
36	12.67	12.5	51.20	20.3	28.42	22.3	23.02	63.6
Mittl, Ort	7.69	29.1	45.55	39.7	25.10	19.6	18.76	51.6
sec 8, tg 8		-1-0.326		+ 0.694		1.409		-0.146

7072	355) h U	rsae maj.	357) d U	rsae maj.	358) 8 U	rsae maj.	359) 🖖	Argus.
1913	AR.	Dekl. - -	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl.
	9 ^h 24 ^w	63° 26′	9 ^h 26 ^m	70° 12′	9 ^h 27 ^m	52° 4′	9 ^h 27 ^m	40° 4′
Jan. 0	44.02 48	27.9	52.68 60	41.3 16	4.85	22.I 8	17.17 26	53.7
10	44.50	29.2	53.28 49	42.9	5.22	22.9	17.43 20	57.I 25
20	44.89	30.9 21	53.77 38	44.0	5.53 24	24.0	17.63	00.0
30	45.19 20	33.0 23	54.15	47.1 26	5.77 16	25.5	17.77	04.0
Febr. 9	45.39	35.3	54.38	49.7	5.93 8	27.2	17.86	67.3
19	45.48	37.7	54.48 -	52.4 27	6.01 ₁	29.1	17.88	70.5 29
März 1	45.46	40.1	54.45	55.I 26	6.02 6	31.1	17.85 8	73.4
II	45.35	42.6	54.29 27	57.7	5.96	33.1	17.77	70.1
21	45.16 26	44.8	54.02	60.1	5.83 18	35.0	17.64 16	78.4
31	44.90	46.8	53.65	62.2	5.65	36.7	17.48	80.4
April 10	44.58	48.4	53.22 48	62.0	5.44	38.2	17.30	81.8
20	44.23 35	40.6	52.74 51	65.2	5.20 24	39.3 8	17.11	82.9 6
30	43.87 36	50.3	52.23 50	65.9 7	4.96	40.I	16.90	83.5
Mai 10	43.51	50.0	51.73 49	00.2	4.71	40.6	16.69	83.7
20	43.10	50.5	51.24	65.9	4.48	40.6	16.50	83.5
30	42.84	40.0	50.78	65.2	1 27	40.3	16.21	82.8
Juni 9	12.57	48.8	50.30	63.9 16	4.00	39.6	16.15	81.8
19	42.35	47.4	50.06 33	62.3	3.95	38.5	16.00	80.3 17
29	42.18	45.5 21	49.80	60.2 24	3.85 6	37.1 14	15.89	78.6
Juli 9	42.08	43.4	49.63	57.8	3.79	35.4	15.80	76.6
19	42.04	41.0	49.54	55.2	3.78	33.5	15.75	74.3
29	12.07	28 4 20	40.54	52.3	3.82	31.4	15.74	71.0
Aug. 8	42.17	35.6	40.65	49.2	10.5	20.I -3	15.76	60.4
18	1142.36	32.4	49.86 28	15.8 34	4.05	26.4	15.83	66.7
28	42.60	29.4	50.14	42.6	4.23	23.9	15.94	64.4 23
Sept. 7	42.90	26.5	50.51	39.4	4.46	21.3	16.c9	62.3
17	43.26	226 29	50.07	36.3	4.74	18.8 25	16.20	60.5
27	43.60 43	208	ET ET 34	22.4	5.06 32	16.3 25	16.52	50.0
Okt. 7	44.17	18.2	52 12	30.7	5.42	13.8 25	16.80	58.1
17	44.71	15.8	52.80	28.2	5.82 40	11.5	17.12 32	57.6
27	58	21	74	26.1 ²¹	6 26 44	21	17.46	57.7
Nov. 6	45.29 61 45.90 61	13.7	53.54 ₇₈ 54.32 ₈₁	24.4	6.72 46	9.4 ₁₈	TM 80 3/	58.4
16	46.54 65	10.6	55.13 82	23.I 13	7.21 49	6.1 15	TS 2.1	507
26	AM TO	9.7	" " O "	22.4	7.70 49	1.0	18.60 39	61.5
Dez. 6	47.84	9.3 4	56.77	22.I 3	8.19	4.9 8 4.1	18.97 37	63.8 23
	62	1	78	3	48	4	36	27
16 2 6	48.46	9.4 6	57·55 73	22.4 8	8.67	3.7	19.33	66.5
36	49.03 51	IO.O	58.28 65 58.93	23.2	9.11	3.8	19.65 28	69.5 33 72.8 33
30	49.04	11.1	50.93	24.5	9.52	4.3	19.93	/ 4.0
Mittl. Ort	41.04	34.8	48.67	48.9	2.78	28.0	16.32	67.4
sec o, tg o	2.237	-1-2.001	2.954	+2.780	1.627	1.283	1.307	0.842

	360) 10 L	eon. min.	366) 8 A	ntliae.	367) ε I	eonis.	368) v Ur	sae maj.
1913	AR.	Dekl. +	AR.	Dekl.	AR,	Dekl.	AR.	Dekl.
	9 ^h 28 ^m	36° 46′	9 ^h 40 ^m	27° 22'	9" 40"	24" 10'	9 ^h 44 ^m	59° 26′
Jan. o	55.35 31	60.2	20.10	3.8	56.08 29	29.3	51.34 46	46.6
10	55.00 26	60.2	20.35	0.8	56.37	28.5	51.80 39	47.5
20	55.92 20	60.5	20.56	9.8	56.61	28.1	52.19 30	48.9
30	50.12	61.1	20.72	12.8 29	56.81	27.9	52.49 21	50.7 20
Febr. 9	56.26	62.0	20.83	15.7	56.95	28.0	52.70	52.7
19	56.34	63.1	20.80	18.3	57.03	28.3	52.83	54.0
März 1	56.36	64.4	20.89	20.7	57.07	28.9	$52.86 - \frac{3}{6}$	57.2
11	1622 3	65.8	20.85 4	22.0	5705	29.6	52.80	59.6
2.1	1625	67.T 13	20.77	24.7	56.99	30.4	52.66	61.0
31	56.13	68.4	20.66	26.2	56.90	31.3	52.46	63.9
9	15	11	13	12	11	8	24	18
April 10	55.98 16	69.5 10	20.53	27.4 8	56.79	32.1 8	52.22	65.7
20	55.82	70.5 8	20.38 16	28.2	56.66	32.9 7	51.93 30	67.0
30	55.65 17	71.3	20.22	28.6	56.52	33.6	51.63 31	68.0
Mai 10	55.48 16	71.8	20.07 16	28.7	56.38	34.2	51.32 30	68.6
20	55.32	72.1	19.91	28.4	56.25	34.6	51.02	68.7 _
30	55.18	72.1	19.77	27.8	56.14	34.9	50.74 25	68.4
Juni 9	55.07	71.9 5	19.65	26.9	56.04	35.1	50.49	67.7
19	54.98	71.4 8	19.54	25.7	55.97	35.0	50.28 16	66.5
29	54.93 2	70.6	19.46	24.2 16	55.02	34.9	50.12	65.0 15
Juli 9	54.91	69.7	19.40	22.6	55.90	34.6	50.01	63.1
19	54.92	68.6	19.37	20.7	0	24 T	49.95	60.9
29	54.96	67.2		18.8	55.90 3	34.1 6	0	58.5 26
Aug. 8	55.04	65.8	19.37	16.8	55.93 6	33.5 8	49.95 5	
18	55.16	64.0	15 19.46	21	55.99 10 56.09	32.7	100 12	55.9 31 52.8 30
28	55.31	62.2	19.56	14.7	50.21	31.7 11 30.6	50.30	49.9
	19	19	14	15.0	16	13	23	49.9
Sept. 7	55.50 23	60.3	19.70 16	11.4	56.37 18	29.3	50.53 28	47.0 20
17	55.73 25	58.4	19.86	10.1	56.55 22	27.9	50.81	44.1 29
27	55.98	50.4	20.07	9.1 6	56.77 25	26.4 16	51.10	41.2
Okt. 7	56.27 32	54.3 20	20.31 28	8.5	57.02 28		51.50	38.5 26
17	56.59 36	52.3	20.59	8.4	57.30	23.0	52.01	35.9
27	56.95	50.4 .0	20.80	8.8	57.61	21.2	52.51	33.5
Nov. 6	57.32 37	48.6	21.22 33	9.7	57.05	19.3	52.01 53	21.5
16	57.72	46.0	21.57 35	11.1 18	58.30	17.5	53.60	20.8
26	58.12	45.4	21.92	120	58.66	15.7	54.17	28.5
Dez. 6	58.52	44.2	22.27 35	15.2 23	59.02	14.1	54.75	27.7
16	58.90	122	22.61	25	36	14	50	3
26	59.27 37	43.3 6	22 02 31	20.5	59.38	12.7	55.31 54	
36	59.60 33	42.7	22.92 28	20.5	59.71 31	11.5	55.85 48	27.6 28.2
30	39.00	42.4	43.40	23.5	00.04	10.5	56.33	40.4
Mittl. Ort	53.90	63.9	19.36	14.7	54.96	31.2	48.87	54.8
sec ô, tg ô		4-0.748		-0.518		-+-0.449		+1.694

	369) u	Argus.	370) 6 S	extantis.	372) G	r. 1586.	378) π	37.90 27 44.7 16 38.17 24 31.1 38.41 19 40.5 38.74 10 38.8 4 38.5 38.8 4 38.3 38.8 4 38.8 7 9 38.6 8 11 38.6 12 39.6 43.3 12 39.6 38.8 11 38.2 1 40.6 5 38.3 12 40.1 5 38.2 1 40.6 5 37.8 5 6 42.0 5 5 6 42.0	
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	9 ^h 44 ^m	64° 39'	9 ^h 46 ^m	3° 50′	9 ^h 50 ^m	73° 17′	9 ^h 55 ^m	8° 27′	
Jan.	56.79 ₃₈	47.1	51.81 ₂₆	1.9 21	42.43	28.1	37.90 37	44.7	
10	57.17	50.0	52.07	4.I 20	43.17 63	29.5	38.17	12 T	
20	57.46	54.4 20	52.29	6.1	43.80 49	31.4 23	38.41	AT.7	
30	57.65	58.2	52.46	7.9 17	44.29	33.7 25	38.60	40.5 9	
Febr. 9	57.75	62.2	52.59	9.6	44.62 33	36.2	38.74	39.6	
10		66.1	52.67	11.0	144 8T	20.0	38.84	38.9	
März 1	57.67	69.8 37	52.70	12.1	1182 -	41.8 28	28.88	28.5 4	
13	4 /	72.2 33	52.68	13.0 9	44.70 26	44.6 26	38.88	28.2	
21		76.4 28	52.63	13.7	44.44 39	47.2 23	38.84		
31	50.94	79.2	52.55	14.1	44.05	49.5	38.77	38.5	
April 10	56.58	81.6	52.45	14.3	43.58	51.4 16	28.68	28.8	
20	56.10 39	82.5	52.21	11.4	42.02	52.0	28 57	30.2	
30	55.77	85.0	52.22	14.2	42 44 37	54.0	28 15	30.6	
Mai 10	55.34	85.9	52.00	13.9	41.83 61	515	28 22	40.T	
20	1 44	86.3	51.98	13.5	41.22	54.5	38.21		
30	42	86.2	51.87	6	40.65	O	10	4T T	
Juni 9	41	85.5	51.78 9	12.9 12.2 7	40.12 53	53.9 ₁₀	0		
19	30	8.1.2	51.71	11.5	39.65 47	52.9 16 51.3 10	27.05	4	
29	52 26 33	827	51.66	10.6	20.28 3/	40.4	27.80)	
Juli 9	_ 20	80.7	51.63	9.7	38.99	47.I 23	37.86		
	23	24	1	8	20	27	0 1	3	
19	52.85 16 52.69	78.3	51.62	8.9	38.79	44.4 29		4	
Λ ug. 8	52.60	75.6 29	51.64	8.0 8	38.70	41.5 32			
18	16 52 50 -	72.7 69.4 33	51.76	7.2 8 6.4	38.71 38.83	38.3 33	27.08	0	
28	52.67	66.5	51.86	5.9	18 39.09 26	35.0 37 31.3 37	1028 08 10	-	
	16	29	13	4	34	34	13	4	
Sept. 7	52.83	63.6	51.99 16	5.5 I	39.43	27.9 33		0	
17	53.08 34	01.0	52.15	5.4 -2	39.88	24.0			
Okt. 7	53.42 41	58.7 18	52.34 23	5.6	40.43 63	21.4 30		4.4	
,	53.83 48	56.9 12	52.57 25	6.I 8	41.06 72	18.4 27	-5	1.0	
17	54.31	55.7	52.82 28	6.9	41.78	15.7	39.03	15	
N: 27	54.84	55.0	53.10	8.0	42.59 86	13.2	39.31 30	37-7 17	
Nov. 6	55.41 60	54.9 6	53.40	9.4	43.45 91	11.2	39.61	36.0 18	
16	56.01 60	55.5 13	53.73	II.I 19	44.36	9.6	39.94	34.2 20	
Dez. 6	50.61 58	50.8 18	54.00	13.0	45.30 94	8.5	40.20	1.4	
Dez. 6	57.19	58.6	54.39	15.1	46.24	8.0	40.02	30.3	
16	57·74 ₅₀	6r.r	54.72	17.3	47.16 87	8.0 6	40.05	28.3 18	
26	58.24	64.0 24	55.02 30	19.5	48.03 79	8.6	41.27 32	26.5 18	
36	58.66	67.4 34	55.30	21.7	48.82	9.8	41.56	24.7	
Mittl. Ort	55.67	65.4	51.03	6.8	37.88	38.0	37.05	43.4	
sec 8. tg 8		-2.113		-0.067		1-3.333		+0.149	
			2.002	0.00/	3.400	1.000	A. O.L.	•	

7070	379) η I	leonis.	380) a	Leonis.	381) y 1	fydrae.	382) q V	elorum.		
1913	AR.	Dekl.	AR.	Dekl. -⊩	AR.	Dekl.	AR.	Dekl.		
	Ioh 2m	17° 10′	10 ^h 3 ^m	12" 23'	10 ^h 6 ^m	11° 55′	Ioh IIm	41" 41'		
Jan. o	36.42	73.0	45.29 28	33.9	21.45	18.6	5.40 31	11.5		
10	36.71 26	71.8	45.57 25	32.4	21.72	21.1	5.71 26	14.8		
20 ; 30 ;	36.97 ₂₀ 37.17 ₁₆	70.8 70.1	45.82 20 46.02	31.2 9	21.96	23.5 25.8	5.97 ₂₀ 6.17	18.1 35 21.6 35		
Febr. 9	37.33	69.7	46.17	29.6	22.29	27.9	6.32	25.0 34		
	10	69.6	46.28	4	22.38	29.8	6.40	28.3		
März 1	37.43 6 37.49	69.7 ¹	16.22 5	29.2 29.0	22.43	31.5	6.42	2T.5 32		
II	37.50	70.0	46.34	20.0	22.43	32.0	6.41 8	211		
21	37.46 6	70.5 6	46.31	29.2	22.40	34.0	6.33	37.0 23		
31	37.40	71.1	46.24	29.6	22.33	34.9	6.22	39.3		
April 10	37.30	71.8 6	46.15	30.0	22.23	35.6	6.08	41.2		
20	37.19	72.4	46.05	30.5 6	22.12	35.9	5.91 18	42.7		
30	37.07	73.1 ⁷	45.93 ,,	31.1 6	22.00	36.0	5.73	43.8		
Mai 10	36.94	73.7 6	45.81	31.7	21.88	35.9	5.54 20	44.5 2		
20	36.82	74.3	45.69	32.2	21.76	35.6	5.34	44.7		
30	36.72	74.7	45.58	32.7 4	21.65	35.2	5.15 18	44.6		
Juni 9	36.62 8	75.1	45.49 8	33.1	21.55 9	34.5 9	4.97 16	43.9 10		
19	36.54 6	75.3 2	45.41	33.5	21.46	33.6	4.81	42.9		
Juli 9	36.48 36.44	75.5	45.36	33.8 2	21.39 5	32.6	4.66	41.6		
	1	75·5	45.32	34.0	21.34	31.5	4.54	39.9		
19	36.43 ⁻ 1 36.44	75.4 2	45.30	34.1	21.31	30.4	4.45 6	37.9 22		
Aug. 8	26 18 4	75.2 74.8 4	45.31	34.1	21.31	29.2 28.0	4.39 3	35.7		
18	26.54	712	45.41 6	228	21.32 5	26.9	4.36 6	33.4 24		
28	²¹ 36.64	73.4	45.50	33.3	21.46	25.8	4.42	28.4		
Sept. 7	36.77	72.5	15 62	227	21.57	25.0	10	26.2		
17	26.02	71.4	15 58	21.8	21.71	24.5	4.52 15	24.2		
27	27.11	70.2	15.06	30.8	21.88	2.1.3	1.87	22.5		
Okt. 7	37·34 ₂₅	68.7 16	46.18	20 5 13	22.09 24	24.3	5.11 29	21.2 13		
17	37.59	67.1	46.42	28.1	22.33	24.8 5	5.40	20.4		
27	27.88	65.3	46.70	26.5	22.61	25.6	5.73 36	20.1		
Nov. 6	38.19	63.4	47.01 31	24.7	22.91 30	26.8	6.09 38	20.4 8		
16	38.52	61.5 20	47.33	22.8	23.23 34	28.3	6.47	21.2		
26 Dog 6	30.07	59.5	47.07	20.8	23.57	30.2	0.87 40	22.0		
Dez. 6	39.22 35	57.6	40.02	18.9	23.91	32.3	7.27 38	24.6		
16	39.57	55.9 16	48.36	17.0 18	24.24 31	34.6	7.65	27.0		
26	39.90	54.3 14	48.08	15.2 16	24.55 20	37.1	8.02	29.8		
36	40.20	52.9	48.99	13.6	24.84	39.6	8.35	32.9		
Mittl. Ort	35.50	74.3	44.43	34.0	20.81	25.2	4.86	25.9		
secδ, tgδ	l .	-1-0.309		-1-0.220		-0.211	1	-0.891		
/ -0 -	7/	• '5-7					337			

	384) 5	Leonis.	383) à Ur	sae maj.	386) p. Ur	sae maj.	387) 30 II.I	Urs. maj.
1913	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl.
	10, 11,	23° 50′	IO _p II _m	43° 20′	10 ^h 17 ^m	41° 55'	10 ^h 17 ^m	65° 59′
Jan. o	52.25	61.1 10	52.79	49.3	10.48	66.7	55.25 60	73.I 8
IO	52.56	60.1 6	53.10	49.2	10.86	$66.6 - \frac{1}{2}$	55.85 51	73.9
20	52.83	59.5	53.48 26	49.6	11.17 26	66.8	56.36	75.2 19
30	53.05 18	59.2	53.74 21	50.3	11.43	67.5	50.79 22	77.1
Febr. 9	53.23	59.2	53.95	51.4	11.64	68.5	57.11	79.2
19	53.34	59.4 6	54.00	52.8	11.78	69.8	57.3T	81.6
März I	53.41	60.0	5.1.16	54.5	11.86	71.3	57.41	84.2
II	53.43	60.7 8	54.17	56.2 18	11.88	73.0	57.40	86.0
21	53.40 6	61.5	54.13	58.0	11.84	74.7	57.29	89.5
31	53.34	62.4	54.03	59.7	11.76	76.5	57.08	91.9
April 10	53.24	63.4	53.90	61.3	11.64	78.I	56.81	94.0
20	53.13	612	5271	62.8	11.48	70.5	E6 48 33	95.8
30	53.01	60 T	5256	63.9	TT.2T 1/	80.7	56.10 38	97.1
Mai 10	52.88	650	53.38	64.8	TT T4	81.6	55,71 39	98.0
20	52.75	66.5	53.19	65.4	10.96	82.2	55.31	98.5 -
20	12	4	17	2	17	3	39	1
Juni 9	52.63 10	66.9	53.02 16 52.86	65.6	10.79 15	82.5 82.5	54.92 37	98.4
	52.53 9	67.2	13	65.5 65.1	1 . 14	82.2	54.55 33	97.9
19	52.44	67.3 T	52.73 II 52.62 g	0	10.51	81.5	54.22 28	15
Juli 9	52.37 52.32	67.0	0	64.3 63.3	10.40 8	80.5	53.94 23	95.4 19
oun 9	2	4	52.54	14	5	12	53.71	93.5
19	52.30	66.6	52.50	61.9 16	10.27	79.3 15	53.55 11	91.2 26
29	52.30	66.0 8	52.49 2	60.3	10.26	77.8	53.44	88.6
Aug. 8	52.33	65.2	52.51	58.5	10.27	76.0 19	53.41 3	85.8
18	52.38 10	64.3	52.56	56.4 24	10.32	74.1	53.44 13	82.8
28	52.48	63.0	52.67	54.0	10.42	71.7	53.57	79.3
Sept. 7	52.60	61.7	52.81	51.7 25	10.55	69.4 24	53.76 26	76.0
17	52.75	60.2	52.99 22	49.2 25	10.72	67.0 25	54.02	72.7 33
27	52.94	58.6	53.22 26	46.7 26	10.93 26	64.5	54.36 41	69.4 33
Okt. 7	53.16 26	56.8	53.48	44. F 25	11.10	62.0 26	54.77 48	00.2
17	53.42	54.9	53.70	41.6	11.48	59.4	55.25	63.2
27	53.71	52.0	54-13 28	30.2	11.81	57.0	55.70 -	60.5
Nov. 6	54.02	50.8	515T 30	36.9 21	12.18 37	54.6	56.39 65	r S T
16	54.36	48.8	54.91	34.8	12.58	52.5	57.04	
26	54.72 26	16.8	55.34	33.0	12.00	50.6	57.72	E 1 1
Dez. 6	55.08 3	45.0	55.77	31.4	13.42	49.0	58.41	53.3
16	55.45	17	56.20	20.2	13.84	177	50.00	527
26	55 70 34	410	+6 60 4ª	20.5	14.25	46.0	50.76	52.7
36	56.12 33	40.7	57.00	29.2	14.64 39	46.5	60.38	53.2
Mittl. Ort	51.27	64.6	51.33	57.I	9.09	74.6	52.34	84.7
sec o, tg o	1.093	1-0.442		+0.944		-1-0.898	1	1 2.247

1	389) µ	Hydrae.	39I) I (Carinae.	390) 31 L	eon. min.	392) Lac. a	Antliae.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	10 ^h 21 ^m	16° 23'	10 ^h 22 ^m	73° 34′	10 ^h 22 ^m	37° 8′	Ioh 23m	30" 37'
Jan. 0 10 20 30 Febr. 9 19 März 1	53.48 28 53.76 25 54.01 20 54.21 16 54.37 11 54.48 6	23.2 25.8 26.4 28.4 25.9 24 33.3 21 35.4 20	41.07 63 41.70 50 42.20 38 42.58 24 42.82 11 42.93 3 42.90 3	58.7 32 61.9 35 65.4 38 69.2 39 73.1 40 77.1 39	52.65 53.00 31 53.31 26 53.57 20 53.77 15 53.92 8	65.0 64.5 64.5 64.8 7 65.5 11 66.6 67.9	10.62 10.91 26 11.17 11.38 11.54 11.65 11.70	16.7 19.7 30 22.8 31 25.9 28.9 28 31.7 27 34.4
April 10 20 30 Mai 10 20	54·54 2 54·53 5 54·48 9 54·39 10 54·29 11 54·18 13 54·05 12 53·93 -	37.4 39.1 40.5 41.6 42.5 6 43.1 3 43.4 1 43.5 2	42.72 25 42.47 37 42.10 48 41.62 53 41.09 60 40.49 64 39.85 67 39.18 60	84.8 36 88.4 33 91.7 30 94.7 26 97.3 21 99.4 16 101.0 11	54.03 3 54.00 7 53.93 10 53.83 13 53.70 15 53.55 16 53.39 16 53.23	69.3 15 70.8 16 72.4 14 73.8 14 75.2 11 76.3 10 77.3 7	11.70 1 11.67 4 11.67 7 11.60 7 11.50 13 11.37 13 11.24 15 11.09 15	34.4 25 36.9 21 39.0 19 40.9 15 42.4 12 43.6 8 44.4 4 44.8 2 45.0
Juni 9 19 29 Juli 9	53.82 II 53.71 IO 53.61 8 53.53 6 53.47	42.9 7 42.2 8 41.4 10 40.4 11 39.3	38.50 67 37.83 65 37.18 61 36.57 56	102.7 102.7 102.2 101.1 99.6	53.08 14 52.94 12 52.82 10 52.72 7	78.4 78.5 78.3 77.8 77.1	10.79 10.66 13 10.53 10.42 10.33	44.8 6 44.2 9 43.3 12 42.1 15
19 29 Aug. 8 18	53.42 53.40 53.40 53.40 3 53.43 7 53.50	38.0 36.7 35.4 34.1 32.8	35.53 40 35.13 29 34.84 17 34.67 6	97.6 95.2 92.6 92.6 89.7 86.4	52.60 52.58 $\frac{2}{2}$ 52.60 4 52.64 $\frac{4}{9}$	76.0 12 74.8 15 73.3 17 71.6 21 69.5	10.26 5 10.21 2 10.19 10.21 10.26 5	39.0 18 37.2 19 35.3 20 33.3 21 31.2
Sept. 7 17 27 Okt. 7	53.59 53.72 16 53.88 54.08 20 54.31	31.7 7 31.0 5 30.5 2 30.3 2 30.5 6	34.70 23 34.93 36 35.29 49 35.78 61 36.39	83.4 30 80.4 26 77.8 23 75.5 19 73.6	52.85 15 53.00 20 53.20 23 53.43 27 53.70	67.4 65.2 62.9 60.5 58.1	10.35 10.48 17 10.65 20 10.85 26	29.5 28.0 26.8 25.9 4 25.5
Nov. 6	54.58 54.88 55.20 55.54	31.1 10 32.1 14 33.5 18	37.10 37.89 37.89 38.73 39.60 86	72.3 7 71.6 1 71.5 6 72.1 12	54.01 34 54.35 38 54.73 39	55·7 24 53·3 22 51.1 20	11.40 11.72 12.07 35 12.07 36	25.6 5 26.1 5 27.1 16 28.7 10
Dez. 6 16 26 36	55.88 34 56.22 33 56.55 30	35·3 21 37·4 23 39·7 25 42·2 26 44·8	39.00 86 40.46 83 41.29 77 42.06 68 42.74	73.3 19 75.2 24 77.6 30 80.6	55.52 40 55.52 41 55.93 39 56.32 36 56.68	49.1 47.4 14 46.0 11 44.9 7	12.43 36 12.79 37 13.16 34 13.50 34 13.82	30.6 24 33.0 26 35.6 29 38.5
Mittl. Ort sec δ, tg δ	52.95 1.042	30.7 0. 2 94	40.21 3.541	78.8 -3·397	51.44 1.255	7 2.2 +0.758	10.15	28.3 0.592

	393) s (Carinae.	394) 36 U	rsae maj.	395) 9 H. I	raconis.	404) 33 S	extantis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	10 ^h 24 ^m	58° 17′	10 ^h 25 ^m	56° 25'	10 ^h 27 ^m	76° 9′	10 ^h 36 ^m	1° 16'
Jan. o	41.44	23.9 32	6.07	26.5	48.89	28.9	59.22	59.7 21
IO	41.83	27.1 26	6.54 47	26.9	49.84 82	30.0	59.52 26	61.8
20	42.16 26	30.7 37	6.95	27.8	50.67 60	31.6	59.78	63.8 18
30	42.42	34.4 28	7.30 27	29.1	51.36	33.7	60.00	65.6
Febr. 9	42.61	38.2 38	7.57	30.8	51.88	36.1	60.18	67.2
19	42.71	42.0	7.75	22.8	52.22 ₁₆	28.8	60.31 8	68.5
März 1	42.74	45.7 37	7.85	35.0	52.28	41.7	60.39	69.6
II	42.70	49.2 33	$7.87 \frac{2}{6}$	37.3 23	52.35	44.6	60.43	70.4 6
21	42.59	52.5 33	7.81	39.6 23	2.0		60.43	71.0
31	42.42	55.4	7.69	41.9	51.79	50.1	60.39	71.4
April 10	42.21	58.0	7.51	43.9	51.30	52.4	60.33	71.5
20	4T 06 25	60 2	7.20	45.7	50.70	54.2	60.24	71.5
30	41.68	62.0	7.04	47.T	50.02	55.8	60.T5	71.2
Mai 10	41.38	62 2 12	6.77	48 T	10.20	56.7	60.04	71.1
20	41.07	64.0	6.50	48.7	48.55	57.1 4	59.94	70.7
	31	3	26	2	74	1	11	5
Juni 9	40.76	64.3	6.24	48.9	47.81	57.0 7	59.83	70.2
	40.45 29	64.0	6.00	48.6 7	47.10 65	56.3 12	59.74 9	69.6
19	40.16 39.89	63.3	5.78 19	47.9 IT 46.8	46.45 59	55.1	59.65 7	69.0
Juli 9		62.1	5.59 15	1 2	45.86 48	53.4 21	59.58 6	68.3
Jun 9	39.65	60.5	5.44	45.3	45.38	51.3 26	59.52	67.6
19	39.44	58.4 23	5.33 6	43.5 21	44.99 28	48.7 28	59.48	66.9
29	39.28	56.1 26	5.27 2	41.4 25	44.71	45.9 31	59.46	66.3
Aug. 8	39.17	53.5 27	5.25	38.9 26	44.54	42.8	59.46	65.7
18	39.12	50.8	5.28	36.3	44.51	39.4 35	59.48	05.3
28	39.13	47.7	5.37	33.2	44.60	35.9	59.53	64.9
Sept. 7	39.21 16	45.0 26	5.51 20	20.2	44.84	22.0	50.62	64.8
17	39.37	42.4	5.71	27.2	45.20	28.1	59.73	64.9
27	30.50	40.I 23	5.96	24.1	45.69 61	24.0	59.88 18	65.2
Okt. 7	39.89 30	38.1	6.27 36	21.1 30	46.30	21.5	60.06	65.8
17	40.25	36.6	6.63	18.2	47.04	18.3	60.28	66.7
27	40.66	35.7	7.04	15.4	47.87	TEE	60.53	67.9
Nov. 6	47 12 47	25 2	7 40 45	12.0 -5	48.80 93	120 43	60.82	60.4
16	41.63 50	35.6	7.08	10.7 18	49.81	10.0		71.1
26			8.50	0.0	50.87	0.2	01.45	73.1
Dez. 6	42.67 52	38.0	9.04	7.4	51.96	8.3	61.79 ³⁴	75.2
16	51	21	53	9	109	4	34	22
26	43.18	40.1	9.57 52	6.5	53.05		62.13	77.4
36	43.05 43	45.8 30	10.09 49	6.1	54.10 98	8.1 7	62.46	170.0
	44.00	45.0	10.50	0.1	33.00	0.0	04.77	01.7
Mittl. Ort	40.94	41.8	4.08	37-5	43.91	42.0	58.67	62.4
sec o, tg ô	1.903	-1.619	1.808	+1.507	4.181	-1-4.060	1.000	-0.022

7070	406) ₺	Argus.	407) 42 I	eon. min.	408) p.	Argus.	409) l I	Leonis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
7	10 ^h 39 ^m	63° 55′	10 ^h 41 ^m	31° 7′	10 ^h 43 ^m	48° 57′	10 ^h 44 ^m	10" 59'
Jan. o	51.38	59.2	2.84	80.2	1.69	21.1	41.78	79.4
10	51.85 47	62.3	3.19 35	79.3 5	2.06 37	24.2 34	42.10 32	77.7
20	52.26	65.7 37	3.49 27	78.8	2.30 26	27.6 35	42.37	76.3
30	52.59	09.4	3.76	78.8	2.64	31.1 36	42.61	75.1
Febr. 9	52.82	73.3	3.97	79.0	2.84	34.7	42.80	74.2
19	52.96 ₆	77.2 38	4.12	79.7	2.98	38.3	42.94	73.6
März 1	53.02	81.0	4.22	80.6	3.05	41.7 33	43.04 5	73.3
11	52.99	84.7	4.27	81.7	3.06	45.0 30	43.09	73.2
21	52.88 18	00.2	4.27	83.0	3.02	48.0 28	43.09	73.4
31	52.70	91.4	4.23	84.3	2.93	50.8	43.06	73.7
April 10	52.47	04.3	4.15	85.6	2.80	52.2	43.01	7.1.2
20	52.18	96.8	4.05	87.0	2.64	55.3 16	42.93	74.7 6
30	51.85 33	98.9 16	3.92	88.1	2.45	56.9 12	42.83	75.3 6
Mai 10	51.50 35	100.5	3.79	89.1 8	2.25	58.I	42.73	75.9 6
20	51.12	101.6	3.65	89.9	2.03	58.8 7	42.62	76.5
30	50.74 50.74	102.2	3.52	90.5	1.81	59.1	42.52	777 T
Juni 9	50 25 39	102.2	3.30	90.8	1.60	58.9 6	42.42	77.7
19	40.07	101.8	3.28	90.8	1.39	58.3	42.33	78.1
29	49.62 35	100.8	3.19	90.7	1.19 18	57.2	42.25	78.5
Juli 9	49.29 33	99.4	3.11	90.2 5	1.01	55.8 14	42.19	78.8 3
19	49.00	97.5	3.06	80.6	0.86	54.0	42.15	70.0
29	48.76	95.3	3.03	88.7	0.74	CTO 21	42.13	70.0
Aug. 8	48.50	92.8	3.02	87.5	0.65	10.6	12.12	78.0
18	48.47	QO.I 2/	3.05	86.1	0.61	17.2	42.14	78.7
28	48.43	87.2	3.10	84.6	0.61	44.7	42.19	78.3
Sept. 7	48.49	84.0	3.20	82.6	0.67	41.9	42.27	77.7 8
17	18 62 14	81.2 4	3.32	80.7	0.79	20.6	42.39	76.0
27	48.86 23	78.7	3.40	78.6	0.06	27.5	12.52	75.8
Okt. 7	49.17	76 - 22	3.60	76.2	1 10 23	25.8	12.71	74.5
17	49.56 39	74.7	3.93	74.0	1.47	34.5	42.93	73.0
27	50.03	73.5	4.2.1	71.7	1.81	8	43.18	71.4
Nov. 6	50.56	72.8	4.52 31	60.2	2.19	33.7_{2} 33.5_{2}	43.45	60.5
16	51.13 57	72.7	4.87 35	67.0	2.60 41	33.8	43.77 32	67.5 21
26	CT 72 39	73.3	~ 00	64.8	3.04 44	247	44.10	D5.4
Dez. 6	52.33	74.5	5.61	62.8	3.49	36.3	44.44	63.3
16	59	19	38	17	44	20	35	21
26	52.92	76.4 78.8 ²⁴	5.99 38	61.1	3.93 42	38.3 40.8	44.79 34	50.2
36	53.49 51 54.00	81.7	6.37 35 6.72 35	59.7 10 58.7	4·35 4·74	43.7	45.13 ₃₂ 45.45	59·3 ₁₉ 57·4
Mittl. Ort	51.02	78.2	1.87	87.1	1.41	37.2	41.14	80.9
sec 8, tg 8	2.277	-2.045	1.168	+0.604	1.523	-1.149		+0.194
~ 4 ~ . 7 . 6 .	//	1.04)		0.004	,)~3	-1147	2.019	7-1-74

	0.1	7131613	IX () I/I()			131(171)		
1010	415) i V	elorum.	416) β Ui	rsae maj.	417) α Ui	rsae maj.	418) y l	eonis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.
	10 ^h 56 ^m	41" 45'	10 ^h 56 ^m	56° 50′	10 ^h 58 ^m	62° 12′	11, 0,	7° 48'
Jan. o	9.79 35	18.4	37.77 50	43.1	24.28	61.1	32.35 32	22.6
10	10.14	21.4	38.27	43.1 6	24.85	61.3 8	32.67 28	20.7 16
20	10.45	24.0	38.72	43.7	25.30	62.I	32.95 24	19.1
30	10.72	27.9 22	39.11	44.8	25.80 36	63.3	33.19 20	17.7
Febr. 9	10.92	31.2 34	39.42	46.3	20.10	65.0	33.39	16.6
19	11.07	34.6	39.66	48.1	26.43	67.1	33.55	15.7
März 1	11.17	37.7 31	39.81	50.3	26.60	69.5 26	33.66	15.2 5
11	11.21	40.8	39.88	52.7	26.68	72.1 26	33.72	14.9
21	11.20	43.6	39.88 8	55.I 24	26.66	74.7 25	33.74	14.9
31	11.15	46.1	39.80	57.5	26.56	77.2	33.73	15.0
April 10	11.07	48.3 18	30.66	59.8 20	26.30	70.6	33.69	15.3
20	10.95	50.1	39.47	61.8	26.16 28	81.7 18	33.62 7	15.7 6
30	10.81	51.6	39.25	63.5	25.88	83.5	33.54 10	16.3
Mai 10	10.65	52.7 6	39.00 27	64.9	25.57 31	84.9	33.44	16.8
20	10.48	53.3	38.73	65.8	25.24 33	85.8	33.34	17.4
30	TO 20	525	28 47	66.3	24.91	86.3	33.24	18.0
Juni 9	10.13	53.4	38.21	66.4	24.50	86.3	33.11	18.5 6
19	9.96	52.0	37.96 23	66.0	24.28 31	85.8 5	33.05 8	TO.T
29	9.80	52.0 9	37.74 18	65.2	21.00	84.8	32.97	19.5
Juli 9	9.66	50.8	37.56	63.9 16	23.75	83.4	32.90	19.9
19	9.53	10.0	37.40	62.2	23.55	81.6	32.85	20.2
29	0.42	47.2	27.20	60.3	22.40	79.4	32.81	20.4
Aug. 8	9.35	45.T	37.21	r80 23	23.30	760 25	32.70	20.5
18	9.31	42.0	37.18	55.4 28	23.25	74 T	32.79	20.5
28	9.31	40.7	37.21	52.6	23.25	71.0	32.82	20.3
Sept. 7	9.36	38.3	37.29	49.3	23.33	67.5	32.89	19.8
17	9.45	26.2	27.42	46.1 3-	23.47	64.1 34	32.98	TOT
27	0.60	24.4	37.61	42.9	22 60	60.7 34	22 TT 13	18 2
Okt. 7	0.80	22.0	37.86	30.6 33	23.97	57.3 34	33.27	17.1
17	10.04	31.8	38.18 32	36.4 ³²	24.31	54.0 33	33.47	15.8
	29	Ü	37	22.4	42	31	24	10
Nov. 6	10.33	31.1	38.55 42 38.97	33.4 ₂₈ 30.6	24.73	50.9 29 48.0 26	33.71	14.2
16	37	- 4	40	28.0	25.20 53	45.4	33.98 30 34.28 31	
26	11.44	31.5 10	39·43 ₅₁ 39·94 ₅₂	258 22	25.73 26.30 57	45.4 22 43.2	34.60 32	8.4
Dez. 6	11.85	34.0	40.46	24.0	26.89 59	41.5	34.94	6.2
	40	20	54	14	61	12	34	2.1
16	12.25	36.0 25	41.00 53	22.6	27.50 61	40.3	35.28	4.1
26	12.65	38.5 28	41.53 51	21.8	28.11	39.6	35.62 34 35.62 32	2.0
36	13.02	41.3	42.04	21.6	28.69	39.5	35.94	0.1
Mittl. Ort	9.60	32.7	36.00	56.3	22.15	75.2	31.82	23.6
sec 5, tg 5		-0.893		1.531		+ 1.899	_	+0.137
7, 5	- 57-			. 55.	7-			5/

4.00	420) 🖞 Ur	sae maj.	421) β C	rateris.	422) 6 1	eonis.	423) 9 I	eonis.
1913	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	II ^h 4 ^m	44° 57′	11 ^h 7 ^m	22° 20'	11, 6,,,	20" 59'	11, 0,,	15° 53
Jan. o	47.85	63.0	22.88	53.8 27	29.67	56.3	41.16	74.9
10	48.20	62.5	23.20 32	56.5 27	30.00 33	54.9	41.48 30	73.3
20	48.63	62.5	23.48	59.2 27	30.31 27	53.8 8	41.78 26	72.0
30	48.96 33	62.9	23.73	61.9 26	30.58 22	53.0	42.04 21	71.0
Febr. 9	49.23	63.8	23.93	64.5	30.80	52.6	42.25	70.3
19	49.44	65.1	24.09 _	67.0	30.97	52.6	12.12	69.9
März I	10.58 14	66.7	24.20	69.3	21 10	52.8 2	42.55	69.9
II	49.50 8	68.6	24.27	21	31.18	3	42.62	70.1
21	49.68	19	24.29	71.4 19	31.21 3	53·3 ₇ 54.0 0	42.65 3	TOF
31	49.64	70.5 ₂₀ 72.5	24.28	73.3 16	31.20	9	42.65	71.1
	8	/2.5	24.20	74.9	31.20	54.9	4	
April 10	49.56	74.5 18	24.23	76.2	31.16	55.9 IO	42.61 6	71.8
20	49.44	76.3 16	24.16	77.2	31.09 8	56.9	42.55 8	72.6
30	49.29 17	77.9	24.07	77.9	31.01	58.0	42.47 10	73.5
Mai 10	49.12	79.3	23.97	78.4	30.90	58.9	42.37 10	74.3
20	48.95	80.4	23.86	78.6	30.79	59.8	42.27	75.1
30	48.76	81.1	23.74	78.5	30.68	60.5	42.16	75.8
Juni 9	18 58 10	81.4	23.63	78 T	30.57	61.1	12.06	76.3
19	48.42	81.3	23.52	77.5	30.47	61.5	47.06	76.8
29	48.27	80.9	23.41	76.6	20.28	61.6	47.88	77.1
Juli 9	48.14	80.2	23.32	75.6	30.30	61.7	41.80	77.3
	11	12	8	75.0	6	2	6	
19	48.03 8	79.0	23.24 6	74.4	30.24	61.5	41.74	77-3
29	47.95	77.6	23.18	73.1	30.19	01.1	41.70	77.2
Aug. 8	47.90	75.8 20	23.14	71.7	30.10	60.5 8	41.07	76.9
18	47.88	73.8 23	23.12	70.3	30.16	59.7 10	41.67 2	76.4
28	47.90	71.5	23.13	68.9	30.18	58.7	41.69	75.6
Sept. 7	47.06	60.0	23.17	67.6	30.23	57.5	41.74	74.7
17	48.07	66.0	323.26	66.4	20 22	56.0	41.83	725
27	48.22	63.2	22 28	600	20 45	r12 1/	41.05	72.I
Okt. 7	48.42	60.3	22.54	64.0	30.6T	52.5	42.11	70.6
17	48.67 25	57.4	23.74	64.7	30.81	50.5	42.30	68.8
0.77	29	29	25	2	24	22	24	660
Nov. 6	48.96	54.5 28	23.99	64.9	31.05 27	48.3	42.54 27	66.8
Nov. 6	49.29 28	51.7 26	24.27	65.5	31.32 31	46.1	42.81 30	64.8
	1 1 11	49.1	24.58 34	66.6	31.63	43.8 23	43.11 32	62.6
Day 6	50.08	46.7 20	24.92	08.0	31.90 36	41.5	43.43 25	60.3
Dez. 6	50.51 43	44.7	25.27 35	69.8	32.32	39.3	43.78 35	58.1
16	50.04	43.0	25.63	72.0	32.68	27.2	44.13	56.0
26	51.38	41.7	25.08 33	74.4	22.03 35	35.3 16	11.18 35	54.0
36	51.80 42	41.0	26.31 33	76.9 25	33.38 35	33.7	44.82 34	52.3
Mint o	46.66	716	22.64	60.0			40.58	70.0
Mittl, Ort sec δ, tg δ	1	74.6	22.04	62.3	29.02	61.9	40.58	79.0

	425) v U	rsae maj.	426) 8 (rateris.	427) 5	Leonis.	428) π.C	entauri.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	11 ^h 13 ^m	33° 33′	II ^h 14 ^m	14° 18′	11 ^h 16 ^m	6° 29′	11 ^h 17 ^m	54° °'
Jan. 0 10 20 30 Febr. 9 März 1 11 21 31 April 10 20	47.84 36 48.20 34 48.54 30 48.84 25 49.09 19 49.28 14 49.42 8 49.50 4 49.53 5 49.48 9 49.39 10	59.6 10 58.6 6 58.0 3 3 58.1 6 59.7 10 60.9 14 62.3 16 63.9 16 65.5 15 67.0 15	59.63 32 59.95 29 60.24 25 60.49 21 60.70 16 60.86 12 60.98 7 61.09 4 61.09 6 61.09 3	21.7 24 24.1 25 29.0 23 31.3 21 33.4 18 35.2 16 36.8 14 39.3 9 40.2 7 40.9 3	39.50 39.82 39.82 40.11 25 40.36 22 40.58 17 40.75 13 40.88 8 40.96 4 41.00 3 40.97 5 40.92 8	81.3 19 79.4 18 77.6 15 76.1 12 74.9 9 74.0 6 73.4 4 73.0 2 72.8 1 72.9 3 73.2 4 73.6 5	2.03 2.46 39 2.85 39 3.18 36 3.44 20 3.64 14 3.78 7 3.85 1 3.81 5 3.71 13 3.58 18	33.9 27 36.6 32 39.8 34 43.2 35 46.7 37 50.4 36 54.0 35 57.5 33 63.9 28 66.7 24 69.1 21
Mai 10 20	49.29 49.16 49.03	68.4 69.7 70.7 8	60.93 9 60.84 11 60.73 10	41.4 41.4 3	40.84 40.76 40.67	74.1 5 74.6 6 75.2 6	3.40 20 3.20 22 2.98 24	71.2 72.9 74.1 8
Juni 99 19 29 Juli 9	48.89 48.76 48.63 48.51 48.41	71.5 6 72.1 2 72.3 0 72.3 4 71.9 6	60.63 60.53 60.43 60.34 9	41.1 40.7 40.1 40.1 7 39.4 9 38.5	40.57 10 40.47 9 40.38 8 40.30 8 40.22 6	75.8 6 76.4 6 77.0 5 77.5 4 77.9	2.74 2.50 2.50 2.25 2.01 2.01 1.78	74.9 3 75.2 2 75.0 6 74.4 11 73.3 14
19 29 Aug. 8 18 28	48.32 6 48.26 4 48.22 1 48.21 1 48.22	71.3 9 70.4 12 69.2 14 67.8 17 66.1 20	60.18 6 60.12 4 60.08 1 60.07 0 60.07 4	37.5 10 36.5 11 35.4 11 34.3 10 33.3 8	40.16 40.11 40.08 40.07 40.08	78.3 2 78.5 2 78.7 1 78.8 3 78.5 3	1.57 18 1.39 15 1.24 10 1.14 6 1.08	71.9 19 70.0 21 67.9 24 65.5 25 63.0 26
Sept. 7 17 27	48.27 9 48.36 12 48.48 -	64.1 61.8 23 50.5	60.11 8 1060.19 11	32.5 31.8 31.3	40.13 8 40.21 11 40.32	78.2 77.5 8	1.08 1.15 1.28	60.4 ₂₇ 57.7 ₂₄
Okt. 7	48.65 21 48.86 25	57.0 25 54.5 27	60.46 19 60.65 23	31.2 ¹ 31.4 5	40.46 19 40.65 22	75.6 13 74.3 15	1.48 ²⁰ 1.75 ²⁷	53·3 ₁₈ _{51.5} ₁₂
Nov. 6 16 26	49.11 49.41 33 49.74 50.09 38	51.8 26 49.2 26 46.6 24 44.2 23	61.76	31.9 32.8 34.1 35.7	40.87 26 41.13 29 41.42 32 41.74 24	72.8 18 71.0 19 69.1 21 67.0 23	2.08 38 2.46 44 2.90 46 3.36 49	50.3 8 49.5 1 49.4 4 49.8 10
Dez. 6 16 26 36	50.47 39 50.86 39 51.25 37 51.62 37	42.0 19 40.1 16 38.5 13 37.2	62.11 35 62.45 34 62.79 33 63.12	37.6 19 37.6 22 39.8 23 42.1 24 44.5	42.08 34 42.42 34 42.76 33 43.09	64.8 22 62.6 21 60.5 21 58.4	3.85 ⁴⁹ 4.34 ₄₈ 4.82 ₄₆ 5.28	50.8 16 52.4 21 54.5 26 57.1
Mittl. Ort		68.9 + 0.664	59·39 1.032	27.3 —0.255	39.07 1.007	8 2 .6 - 0.114	2.10 1.702	50.8 1.377

4222	429) Gr	. 1771.	433) λ Di	raconis.	434) Ę [lydrae.	436) à Co	entauri.
1913	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
- 1	11 ^h 17 ^m	64° 47′	11 ^h 26 ^m	69° 48′	11 ^h 28 ^m	31° 22′	11 ^h 31 ^m	62° 31
Jan. o	43.92 62	68.8	17.78	24.1	43.21	23.4 26	45.38	59.6 26
10	44.54	68.8	18.53 60	24.2	43.56 35	26.0	45.92 48	62.2
20	45.11	09.5	19.22	24.9	43.88	28.9	46.40	65.2
30	45.01	70.6	19.83	26.2	44.16	31.8	40.82	08.5
Febr. 9	46.03	72.3	20.35	27.9	44.39	34.7	47.16	72.1
19	46.36	74.4	20.75	30.1 25	44.58	37.6	47-43 18	75.8
März 1	46.59	76.8 26	21.04 15	32.6	44.71	40.3 26	47.61	79.6
II	46.71	79.4 28	21.19	35.4 28	44.80	42.9 23	47.72 2	83.3 3
21	46.73	82.2	21.22 8	38.2 28	44.84	45.2	47.74	87.0
31	46.65	84.8	21.14	41.0	44.85	47.3	47.70 11	90.4
April 10	46.40	87.4	20.94 29	12.7	44.82 6	49.1 16	47-59 16	93.6
20	46.26 28	89.7 20	20.65 36	46.2 21	44.76	50.7	47.43 22	96.4 2
30	45.98	91.7 16	20.29	48.3	44.67	51.9	47.21 26	98.9 2
Mai 10	45.65 33	93.3	19.87 46	50.0	44.57	52.8 6	46.95 29	101.0
20	45.29	94.4	19.41	51.2	44.45	53.4	46.66	102.6
30	44.92	95.1	18.93	51.9	44.33	53.6	46.35	103.8
Juni 9	11 55 3/	95.3	18.45	52.I	44.20	53.5	46.02 33	104.5
19	41.10	94.9	17.08	51.8	14.07	53.1 6	45.68 34	104.7
29	42.86 35	94.1	17.53 45	50.0	43.94	52.5 ro	45.34 34	104.3
Juli 9	43.55	92.8	17.12	49.5	43.82	51.5	45.00	103.5
19	43.29	91.1	16.75	47.7	43.71	50.3	44.69	102.2
29	12.07	88.0	T6.44 31	15 5	43.62	48.0	11.12	TOOF
Aug. 8	42.01	86 4 25	T6 TO 23	42.0	1255	47.3	44 78 49	084
18	42.80	82.6	16.0T	4.0.0	1250	45.6	44.00	06.0
28	42.75	80.5	15.91	36.7 33	43.48	43.9	43.87	93.4
Sept. 7	42.78	77.2 28	15.90	34	12.40	12 2	43.82	90.7
17	11/2.88	73.4	13 TS.00	33.3 39	12 55	40.4	12.86	87.7
27	43.06	60.0	16.16	25.7 3/	12.65	30.T	12.08	850
Okt. 7	43.31	66.4 35	16.42 27	220 3/	12.80	280	44.18	82.6
17	43.63	62.9 35	16.79 36	18.4	43.99	37.2	11.18	80 E
27	41	59.6	45	34	14 22	36.9	44.86	78.8
Nov. 6	44.04 47	56 F 31	17.24 17.78 54	15.0	44.23 28	0110	45.21	77.6
16		53.7 28	18.40	8.9 29	44.51 44.83 32	276	4= 82 2"	HH O
26	15.64 59	5T.2	10.00	6.5	45.18	38.6	46.28	77.0
Dez. 6	46.27	49.4	10.83	4.5	45.55	40.I	46.97 59	77.6
	16.00	180	76	14	38	19	00	1
16 26	46.92 65	48.0 9	20.59 78	3.1 9	45.93 38	42.0	47.57 59	78.8
36	47.57 63 48.20	47.1 46.8 3	21.37 75	2.2 2	46.31 46.66 35	44.2 26	48.16 56	80.6 83.0
30	40.20	40.0	44.14	4.0	40.00	40.0	40.72	03.0
Mittl. Ort	41.78	84.5	15.19	40.8	43.19	34.I	45-73	78.1
sec 8, tg 8	2.350	+2.126	2.898	-1-2.720	1.171	-0.610		-1.92

-	1 ت (437	Leonis.	440) 31)	raconis.	44 1) χ Ur	sae maj.	444) ß 1	conis.
1913	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl.
	11 ^h 32 ^m	° 20'	11 ^h 37 ^m	67° 12′	11 ^h 41 ^m	48° 15′	11 ^h 44 ^m	15° 3′
Jan. o	29.92	35.7 22	39.99 68	78.3	28.71 44	28.2	37.76	25.1 18
10	30.25 3	37.9 20	40.67 64	78.2	29.15 42	27.4 2	30.10	23.3 15
20	30.55 26	39.9 18	41.31	78.7	29.57 37	$27.2 - \frac{2}{3}$	38.41 28	21.8
30	30.81	41.7 16	41.88 48	79.8	29.94	27.5 s	38.69 25	20.6
Febr. 9	31.04	43.3	42.30	81.3	30.26	28.3	38.94	19.7
19	31.22	44.7 ₁₀	42.75 29	83.4	30.52 20	29.5 16	39.14 15	10.2
März 1	31.36	45.7	43.04	85.9	30.72	31.I ₂₀	39.29 11	19.0
11	31.45 6	46.6	43.21 6	88.5 27	30.85	33.1 21	39.40 7	19.1
21	31.51	47.1	43.27	91.2 28	30.92	35.2 22	39.47	19.5
31	31.52	47.4 r	43.23	94.0	30.93	37-4 23	39.50	20.1
April 10	31.51	17.5	12 00	06.7	20.88	20.7	39.49	20.9 8
20	31.47 6	47.5	12.86	00 2	20.70	41.8	39.46 6	21.7
30	31.41 7	47.3	42.57	10I.4 ₁₈	30.66	12.8	39.40	22.6
Mai 10	31.34	46.9	12.22	IO2.2	30.50 18	45.5	39.33 9	23.6
20	31.25	46.5	41.83	104.6	30.32	46.9	39.24	24.4
30	31.16	46.0	41.42	105.4	30.13	48.0	30.14	25.2
Juni 9	3T.07	15.5	41.00	105.8	29.93	48.6	39.04	25.9
19	30.98	11.0	40.59 40	105.7	29.73	48.0	28.04	26.5
29	30.89	44.3	40.19 38	105.0	29.55	48.7 6	38.85	26.9
Juli 9	30.81	43.7	39.81	103.9	29.38	48.1	38.76	27.2
19	30.74 6	43.2	39.48	102.3	20.22	47.2	38.68	27.4 -
29	30.74 6	42.6	20.10	100.2	29.09	45.8	38.61	27.2
Aug. 8	20.64	42.2	38.95 ₁₈	07.8	28.98	44.T	38.56	27.1
18	30.62	41.0	38.77	95.0	28.91	42.0	38.52	26.6
28	30.62	41.6	38.66	91.9	28.87	39.7	38.51	26.0
Sept. 7	30.64	41.6	38.62	88.6	28.86	20 r	38.52	25.1
17	30.70	41.8	1628 67 5	84.7 39	28 OT 5	37.1 ₂₈ 34.3 ₂₄	38.56	24.0
27	30.80	122 4	28 80	81.0 37	20.0T	30.9	38.65	22.6
Okt. 7	20.02	12.8	20.02	PP 0 37	20 76 15	27.8 31	28 77	210
17	31.10	43.8	30.32	73.7	29.36	24.6 32	38.93	19.2
	21	12	38	35	25	32	20	20
No. 27	31.31	45.0	39.70 46	70.2	29.61	21.4 31	39.13 24	17.2
Nov. 6	31.56 28	46.5	40.16	00.9		18.3 30	39.37 28	15.1
16	31.84 31	48.2 20	40.70 61	64.0 27	30.27	15.3 27	39.05 31	12.8
Dez. 6	32.15 33	50.2	41.31 66	61.3	30.67	12.6	39.96 33	8.2 23
7	32.48 33	52.3	41.97 69	59.2	31.10	10.2	40.29 35	0.2
16	32.82	54.5 22	42.66	57.6	31.54 46	8.2 16	40.64	5.9 **
26	33.10	56.7	43.30 69	56.5	32.00	6.6	40.99	3.8
36	33.50	58.9	44.05	56.0	32.45	5.5	41.33	1.8
Mittl, Ort	29.65	36.1	37.85	95.5	27.69	42.5	37-39	30.4
sec ò, tg ò	1.000	-0.006		,,,,	, ,		1.036	+0.269

	445) β Y	irginis.	447) y U	rsae maj.	450) o \	irginis.	452) & Co	entauri.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	11 ^h 46 ⁱⁿ	2 14	11 ^h 49 ^m	54° 10′	12 ^h 0 ^m	9" 12'	12h 3m	50° 14
Jan. o	10.03	77.0 21	16.78	26.6	46.88	54.0 20	50,15 45	I.I 2.
10	10.36 33	74.9 20	17.20 46	25.9 2	47.22 34	52.0	50.60 41	3.5 27
20	10.00 28	72.9	17.74	25.7	47.54 28	50.3	51.01 38	6.2
Febr. 9	10.94	71.2	18.16	26.1	47.82 26	48.8	51.39 32	9.2
reor. 9	11.18	69.7	18.53	27.0	48.08	47.6	51.71	12.4
19	11.38	68.5 10	18.83	28.5 18	48.29	46.7	51.98 21	15.8
März 1	11.53	67.5 6	19.06	30.3 21	48.46	40.2	52.19 15	19.1
11 21	11.64	66.9	19.21 8	32.4	48.58 8	45.9	52.34 10	22.5 32
31	11.71	66.3	19.29 19.31	34.8 24	48.66 48.71	46.0 ² 46.2	52.44 52.48 4	25.7 30 28.7
	0	0	5	37.2	I	5	1	28
April 10	11.75	66.3	19.26	39.7	48.72	46.7 6	52.47 4	31.5 26
20	11.72	66.5 66.8 3	19.15	42.0 22	48.71	47.3	52.43 9	34.1 22
30 Mai 10	11.61	67.3 5	18.99 18	44.2 19	48.67 7	48.0 7	52.34 12 52.22	36.3 19
20	11.53	67.8	18.59	47.6	48.53	49.5	52.07	39.8
	8	68.3	23	48.8	8	7	17	11
Juni 9	11.45	68.9	18.36 18.12	49.5	48.45 9 48.36	50.2 50.9	51.90 19	40.9
19	11.27	69.5	17.88	40.8	48.26	ETE	51.51	41.8
29	11.18	70.0	17.65	10.6	48.17	52.I	ET 20	41.6
Juli 9	11.10	70.6	17.43	49.0	48.08	52.5	51.10	41.1
19	11.02	71.0	17.23	47.9	48.00	52.8	50.89	40.1
29	10.96	71.4	17.06	16.4	47.03	53.0	50.71	38.7
Aug. 8	10.91	71.8 4	16.02	446	47.86	52.T	50.54	37.0 20
18	10.88	72.0	16.81	42.4 26	47.81 5	52.9	50.40 10	35.0 2
28	10.86	72.0	16.74	39.8	47.79	52.6	50.30 6	32.8
Sept. 7	10.88	71.9	16.72	37.0	47.78	5 52.I	50.24	30.5
17	10.92	71.6	16.74	33.9	47.81	51.4 7	50.23	28.2
27	1911.01	70.9 8	16.83	30.4 35	²³ 47.88	50.3 12	50.30 12	25.7 20
Okt. 7	11.13 16	70.1	10.98	27.0	47.98	49.0	50.42	23.7 18
17	11.29	69.0	17.18	23.6 34	48.12	47.6	50.61	21.9
27	11.49 24	67.7	17.45	20.3	48.31	45.9 19	50.87	20.4
Nov. 6	11.73	66.1	17.77	17.0 33	48.53	44.0 21	51.18 37	19.4
16	12.00	64.3	18.15	13.8 28	48.80	41.9 22	51.55 42	10.9
26	12.30	62.2	10.50	II.O 25	49.09	39.7	51.97 45	19.0
Dez. 6	12.63 33	60.1	19.04 49	8.5	49.41	37.4	52.42	19.6
16	12.97	57.8	19.53	6.5 16	49.75	35.1 22	52.89	20.7
26	13.32	55.6	20.04	4.9 ₁₀	50.10	32.9	53.30 .6	22.4 21
36	13.66	53.4	20.54	3.9	50.44	30.8	53.82	24.5
Mittl. Ort	9.81	78.0	15.63	42.4	46.68	58.0	50.63	16.3
sec 8, tg 8	1.001	+0.039	1.709	+1.386	1.013	+0.162	1.564	-1.202

	453) ε	Corvi.	454) 4 H.	Dracon.	456) 8 Ur	sae maj.	459) β Cl	namael.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	12 ^h 5 ^m	22° 8′	12 ^h 8 ^m	78° 5′	12 ^h 11 ^m	57° 30′	12 ^h 13 ^m	78° 49′
Jan. o	38.73 35	2.6	11.65	39.1 38.8 3	8.66	39.7 ₈	10.95	25.3 18
10	39.08	5.C 25	12.84	J	9.19	38.9	12.17	27.I ₂₃
20	39.41	7.5 25	13.98 106	39.2	9.69	38.6	13.30	29.4 28
30 Febr. 9	39.70 26	10.0	15.04 92	40.3 16	10.10	39.0 9	14.32 88	
r cor. 9	39.96	12.5	15.96	41.9	10.58	39.9	15.20	35.5
19	40.18	14.9	16.73	44.0 26	10.92 28	41.3	15.93 56	39.0
März 1	40.36	17.1	17.32	40.0 28	11.20	43.2	10.49 28	42.7
11 21	40.49	19.2	17.72		11.40	45.4 25	16.87	46.6 39
31	40.58	21.0 22.6	17.91	52.3	11.52	47.9 26	17.10	50.5 38
,	I	14	20	55.3	3	50.5	11	54.3
April 10	40.64	24.0	17.70 38	58.3 28	11.53	53.1 26	17.03 28	58.0 36
20	40.63	25.2 9	17.34	01.1	11.44	55.7 23	16.75	61.6
Mai 10	40.59 6 40.53	26.I 26.7	16.79 66 16.13		11.30	58.0 21 60.1	16.33	64.9 29
20	40.46	27.I 4	15.36 77	65.6 67.2	10.88	61.8	15.78 67 15.11	70.3 25
	9	2	84	11	25	13	70	21
30	40.37	27.3	14.52 88	68.3 6	10.63	63.1	14.35 85	72.4 16
Juni 9	40.27	27.2	13.64	68.9	10.36	64.0	13.50 91	74.0 10
19	40.17	26.9 26.4	12.74 90	68.9 68.4	9.82	64.4	12.59 95	75.0 6
Juli 9	39.96	1	11.84 86	67.3	- 20	64.4 63.9	11.64 95	75.6 75.6
	10	25.7	81	16	9.56	10	94	0
19	39.86	24.8	10.17	65.7 20	9.31	62.9	9.75 88	
A 11.07 8	39.76 8	23.8	9.44 65	63.7 25	9.09 20	61.5 19	8.87 80	73.9 16
Aug. 8	39.68 6	22.6	8.79 54	61.2	8.89 16	59.6	8.07 71	72.3 21
28	39.62	21.4	7.83	58.3	8.73 12 8.61	57.4 ₂₆ 54.8	7.36 6.80 56	70.2 67.8 ²⁴
	39.57	11	30	55.1	7	29	41	27
Sept. 7	39.55	19.1	7.53	51.6	8.54 2	51.9 31	6.39 23	65.1 29
17	39.57	18.0	7.38	47.9	8.52 ² 8.56 ⁴	48.8	6.16	62.2 32
Okt. 7	39.64 10	17.0	7.40	43.6 43	8.66	45.1 41.6 35	6.16	59.0 30 56.0 38
Okt. 7	39.74 39.89	16.4 16.0	7.57	39.8 39	8.83	38.0 36	6.81 43	
	19	0	7.90		24	36.0	63	53.2
No. 27	40.08	16.0	8.40 65	32.2 36	9.07 30	34.4	7.44 83	50.8
Nov. 6	40.32	10.4	9.05 81	28.0	9.37	31.0	8.27 99	48.7 16
16	40.60	17.1	9.86	25.4 28	9.74 43	2/./ 30	9.26	47.1
Dez. 6	40.92 41.26	18.2	10.80		10.17	24.7 22.0	10.38	40.0
	30	19.7	114	18	51	22	127	43.7
16	41.62 36	21.5	12.98	18.4	11.15	19.8	12.87 129	45.9 9
26	41.98	23.6	14.17	17.2 6	11.68 53 12.21 53	18.1	14.16	46.8
36	42.33	26.0	15.37	16.6	12.21	17.0	15.41	48.3
Mittl. Ort	38.87	9.3	8.22	58.8	7.58	57-3	13.20	45.1
Sec o, tg o	1.079	-0.407	4.852	-1-4.746	1.862	-1-1.571	5.165	5.068

	460) n 1	irginis.	462) a Cr	ucis med.	466) 20	Comac.	465) ò	Corvi.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	12 ^h 15 ^m	o° II'	12 ^h 21 ^m	62° 36′	12 ^h 25 ^m	21° 22'	12 ^h 25 ^m	16° 1′
Jan. o	27.28	1.5 21	44.30	45-2 20	21.30 36	30.8 18	21.45	48.3
10	27.62 34	3.6 21	44.89 59	47.2 25	21.00	29.0	21.79 34	50.6
20	27.94 20	5.7 18	45.45 50	49.7	22.00 34	27.5	22.12	52.9
30	28.23	7.5	45.95	52.6	22.31 28	26.4 8	22.42	55.2 22
Febr. 9	28.49	9.2	46.39	55.7	22.59	25.6	22.69	57.4
19	28.71	TO.5	46.77	59.1 ₂₆	22.83	25.3	22.92 20	59.5 20
März 1	28.80	11.6	47.07 30	62.7	23.03 16	25.4	23.12	61.5
11	29.03	12.4 6	47.29 16	66.3 36	23.19	25.8 4	23.27	63.2
21	29.13	13.0	47.45	60.0	23.30	26.6	23.38	64.7
31	29.19	13.3	47.52	73.4	23.37	27.6	23.45	65.9
April 10	29.21	13.4	47.53	76.7	23.40	28.7	23.49	67.0
20	29.21	13.3	47.48	70 8 31	23.40	20.0	23.50 2	67.8 6
30	29.19	13.1	47.37	826	23.37	31.3	23.48	68.4
Mai 10	29.14	12.7	47.20	85.2	23.32	32.6	23.44	68.8 4
20	29.08	12.2	46.99	87.3	23.25	33.8	23.39	69.0
30	29.01	11.7	46.74	88.9	23.16	34.9	22 22	69.0
Juni 9	28.02	II 2 5	46.46	90.2	23.06	25 8	22.22	68.8
19	28.85	10.6	46.15	90.9	22.06	36.6	22.T/	68.5
29	28.76	10.0	45.82 33	QI.2	22.85	37.2	22.04	680
Juli 9	28.67	9.4	45 49 33	91.0	22.75	37.5	22.94	67.4
19	28.58	5	33	7	22.64	1	22.84	7
29	28.50	8.9 8.4	45.16 44.84	90.3 89.1	. 9	37.6	9	66.7 8 65.9
Aug. 8	28.43	8.0	24)	87.5	22.55 9	37·4 3	22.75 9	65.0
18	28.37	7.7	44.55 ₂₆ 44.29 ₂₀	85.6	22.38	37.1 7 36.4 7	22.59 7	64.1
2.8	28.33	7.6	44.09	83.3 23	22.33	35.5	22.54	63.2
	2	.0	14	25	3	12	3	8
Sept. 7	28.31	7.6	43.95	80.8	22.30	34.3	22.51 0	62.4
17	28.32 5 28.37 5	7.8	43.88	78.2	22.30	32.9 17	22.51 4	61.7 5
Okt. 7	28.47	8.2 ⁷ 8.9 ⁷	43.90	75.5 28	22.33	31.2	22.55 9	60.8
Okt. 7	28.60	9.8	44.02 21	72.7	22.41	29.1	22.64	60.8
,	17	12	44.23	70.4	22.53	27.0	22.76	3
27	28.77	11.0	44.52 ₃₈	68.3 16	22.69	24.7	22.93 21	61.1
Nov. 6	28.98 26	12.4	44.90	66.7	22.90	22.2	23.14 26	61.7
16	29.24	14.1	45.30	65.5 6	23.15	19.6 26	23.40 29	62.6
Dez. 6	29.53 31	16.0	45.00 =8	64.9	23.44	17.0	23.69 33	03.9 16
1.7ez. 0	29.84 33	18.1	40.40	64.9	23.76	14.5	24.02 34	65.5
16	30.17	20.3	47.06	65.4	24.10	12.0	24.30 26	67.4
26	30.52	22.5	47.68	66.6	24.40	9.7 20	24.72 34	69.4
36	30.86	24.8	48.28	68.4	24.82	7.7	25.06	71.6
Mittl, Ort	27.26	0.2	45.30	62.6	21.10	39.9	21.64	52.2
sec δ, tg δ			٠,٠,٠	2	-20	37.9	1.040	7

	470) 8 Car	num ven.	472) x D	racon.	471) β	Corvi.	473) 24 Co	mae sq.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	12 ^h 29 ^m	41° 49′	12 ^h 29 ^m	70° 15′	12 ^h 29 ^m	22° 54′	12 ^h 30 ^m	18° 50'
Jan. o	37.32	33.1	48.18	43.5 7	48.53 36	50.6	46.15	72.7
10	37.74	31.6	48.96	42.8	48.89	52.9 24	40.50	70.8
20	38.14	30.7	49.71	42.7	49.23 32	55.3 24	46.84 31	69.2
30	38.51	30.3 2	50.42 63	43.2	49.55 27	57.7 24	47.15 28	68.0
Febr. 9	38.84	30.5	51.05	44.4	49.82	00.I	47.43	67.1
19	39.13	31.1	51.50	46.1	50.07 20	62.5	47.68	66.7
März 1	39.36	32.2	52.03 44	48.3	50.27 16	64.7	47.88	66.6 -
11	39.55	33·7 ₁₈	52.35 32	50.8 25	50.43	66.8	48.04 12	66.8
21	39.67	35.5 20	52.55 8	53.6	50.54 8	68.7	48.16	67.4
31	39.74	37.5	52.63	56.5	50.62	70.3	48.23	68.3
April 10	39.77	39.7	52.59	59.4	50.67	71.8	48.27	69.3
20	39.75	41.8	52.44	62 2 29	50.68	73.0	48.28	70.5
30	30.68	12.0	52.19 25	64.0	50.67	720	48.26	71.7
Mai 10	30.50	45.0	51.86 33	67.2 23	50.63	74.7	1821 5	72.0
20	39.47	47.6	51.46 40	69.1 19	50.58	75.2 5	48.15	74.I
20	14	15	45	15	8	3	8	I
Juni 9	39.33 16	49.1	51.01 48	70.6	50.50 9	75.5 0	48.07	75.1 76.1
-	39.17	50.2 8	50.53 51	71.5	50.41 10	75.5 I	47.98 10	76.8
19 29	39.01	51.0	50.02 51	72.0	50.31 50.21	75.4	47.88	,
T 11	38.68	51.5	49.51 50	71.9 6	- 11	75.0 6	47.77 10	77.5
Juli 9	16	51.5	49.01	71.3	50.10	74.4	47.67	77.9
19	38.52	51.1	48.52	70.2	49.99 10	73.6	47.57	78.0
29	38.37	50.4	48.07	68.6	49.89	72.7	47.47	78.0
Aug. 8	38.23	49.2	47.00	66.5	49.79 8	71.7	47.38 8	77.7
18	38.12	47.7 18	47.31	64.0	49.71 6	70.6	47.30	77.2
28	38.02 6	45.9	47.02	61.1	49.65	69.4	47.25	76.4
Sept. 7	37.96	43.7	46.80	57.0	40.61	68.3 m	47.22	75.4
17	37.94	41.3	46.67	54.5 34	49.60	67.2	17.22	74.1
27	37.95	38.6	46.62 6	50.8	49.64	66.3 8	17.24	72.6
Okt. 7	38.02 7	35.4 31	46.68	46.6 42	49.73	65.5	47.31	70.7
17	38.14	32.3	46.84	12.0	49.85	65.1	47.42	68.7
27	38.31	29.1	47.11	30.0	50.02	64.9	17.58	66.5
Nov. 6	08 50 22	25 0 32	0 37	3/	50.24	65.T	17.78	64.T
16	38.8r	22.7	47.06	31.8	50.50	65.8	48.02	61.6
26	20 T2 3-	10 7	18 52	287	50.80	66.7	18 2T	50.T
Dez. 6	1 2/ 2 21	16.9	49.17	26.0 27	51.13	68.0	48.62 31	56.5
	20	25	71	23	35	17	34	1
16	39.88	14.4	49.88	23.7 16	51.48	69.7	48.96	54.1
26		12.2	77.00	22.1	51.85 37 51.85 36	71.6	49.31 35	51.8
36	40.70	10.5	51.40	21.0	52.21	73.8	49.66	49.7
Mittl. Ort	36.86	48.2	46.57	63.6	48.83	56.7	46.02	81.1
sec 8, tg 8	1.342	-1-0.895		+2.788	_	-0.423	1.057	-+ 0.34

TOYA	474) a	Muscae.	476) 7 C	entauri.	478) 76 U	rsae maj.	481) β (Crucis.
1913	AR.	Dekl.	AR,	Dekl.	AR.	Dekl.	AR.	Dekl.
	12 ^h 31 ^m	68° 39′	12 ^h 36 ^m	48° 28′	12 ^h 37 ^m	63° 10'	12 ^h 42 ^m	59° 12
Jan. o	57.57 ==	4.9	41.97	42.0	47.18	66.5	36.60	32.I
10	58.30 68	6.7	42.42	44.T	47.79	65.5	37.16	23.8
20	58.08	0.0	42.85 43	16.1	18 08 39	65.T 4	37.60 33	36.0
30	50.61 03	TT 77	1225	40.T	48.04	65.3	38.18	38.7
Febr. 9	60.17	14.8 31	43.61	52.1	49.44	66.2 9	38.62 45	41.7
19	60.65	18.1 33	31	30	49.88	13	38	33
März 1	61.04 39	30	43.92 25	55.1	10	67.5 19	39.01 32	44.9
II	61.33	21.7 37	44.17	58.3 32	50.24 27	69.4	39.33 25	
21		25.4 37	44.38	61.5 31	50.51 19	71.8 25	39.58 19	51.6
31	61.54 11	29.1 36	44.52 10	64.6	50.70 9	74.3 28	39.77	55.1 33
	3	32.7	44.62 6	07.5	50.79	77.1	39.89	58.4
April 10	61.68	36.3	44.68	70.3 26	50.79 8	79.9 28	39.96	61.7
20	61.62	39.6 31	44.68	72.9 23	50.71	82.7 26	39.96 6	04.7
30	61.49	42.7 27	44.65	75.2 20	50.57 21	85.3	39.90 10	67.5
Mai 10	61.29 27	45.4 24	44.58 10	77.2	50.36 26	87.7	39.80	70.0
20	01.02	47.8	44.48	78.9	50.10	89.7	39.67	72.I
30	60.70	49.8	44.35	80.2	49.79	91.3	39.47	73.9
Juni 9	60.33 37	ET 4	1120	81.1	49.47 32	92.4	20.25	75.2
19	59.92	524	11 02	8T 6 5	40.12 35	93.1	20.00	76.1
_ 29	59.48	52.0	1281	81.7	48.76	93.3	28 72	76.5
Juli 9	59.04	52.9	43.64	81.4	48.41 35	92.9	38.45	76.5
	40	5	19	6	34	8	20	
19	58.58	52.4 ₁₀	43.45 20	80.8	48.07	92.1	38.16	76.0
29 Aug 8	58.15	51.4	43.25 18	79.7	47.75 20	90.8	37.88	75.0
Aug. 8	57.74 36	50.0 19	43.07 16	78.3	47.46 26	80.0	37.61	73.7
28	57.38	48.1	42.91	76.6	47.20 22	86.8	37.37 20	71.9 2
20	57.08	45.8	42.78	74.7	46.98	84.1	37.17	69.8
Sept. 7	56.87	12.2	12.60	72.6	16.82	81.2	27.02	67.5
1 17	56.74	40.6 28	42.64	70.5	46.72	77.9	26.02	65.T
27	56.72	AM 8	42.65 8	68 2	46.68	74.4 33	36.02	62.6
Okt. 7	56.82	34.8 30	12.72	66.T	3 16 72 4	70.4	26.00	59.9
17	57.04	32.2	42.87	64.2	46.84	66.7 37	37.14	57.6
	33	23	21	15	21	37	24	2
Nov. 6	57.37	29.9 19	43.08 27	62.7	47.05 28	63.0	37.38	55.5
	57.81 54	28.0 15	43.35 33	61.6	47.33 36	59.3 25	3/./1 20	53.9
16 26	50.35 63	26.5 9	43.00 28		4/.09	55.0 33	30.10 46	52.7
	50.90 68	25.6	44.00	60.7 61.0	48.13 50	54.5 28	38.56	52.0
Dez. 6	59.66	25.2 - 3	44.49	8	48.63	49.7	39.08	51.8
16	60.39	25.5 8	44.94 16	61.8	49.18	47.2 19	39.62	52.2
2 6	01.14	26.3	45.40	63.I 18	49.77 6r	45.3	40.19 57	53.2
36	61.88	27.8	45.86	64.9	50.38	44.0	40.76	54.7
Mittl. Ort	59.05	23.0	42.71	55.7	46.16	86.r	37.72	47.9
sec 8, tg 8		-2.560		-1.130		-1-1.979		-1.679

	482) n ('en t auri.	483) ε Ui	rsac maj.	484) 8 V	irginis.	485) 12 Cai	n.ven.sq.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	12 ^h 48 ^m	39° 42'	12 ^h 50 ^m	56° 25'	12 ^h 51 ^m	3° 51′	12 ^h 51 ^m	38° 46′
Jan. o	36,09 41	10.8	12.95	35.8	13.08	67.9	57.86	61.7
10	36.50 39	12.9	13.46	34.4 7	13.42 34	65.7 20	58.20	60.0
20	30.89 27	15.2 25	13.97 48	33.7	13.75 33	63.7	58.65 39	58.8 7
30	37.26 37	17.7 27	14.45	33.6	14.06 28	61.9	59.02	58.1 2
Febr. 9	37.59	20.4	14.89	34.1	14.34	60.4	59.36 30	57.9
19	37.80	23.2 28	15.28 39	35.I ₁₆	14.59	50.2	50.66	58.3 8
März 1	38.13	26.0 28	15.60	36.7 20	14.80	58.3 6	59.91 20	59.1
11	28.24	28.8	15.85	38.7	14.97	57.7	60.11	60.3
21	38.49	31.5	16.04	41.0 26	15.10 10	57.4 0	60.27	61.0
31	38.60	34.0	16.15	43.6	15.20	57.4	60.37	63.8
April 10	38.67	36.4	16.19	46.2	15.26	57.6	60.42	65.9
20	38.70	38.5	16.16	180 27	15.30	57.9	60.43	68.0
30	38.70	40.4	16.07	51.5	15.30	c8 4 3	60.40	70.1
Mai 10	28 66	42.0	15.93	53.9	15.28	50.0	60.22 7	72.1
20	38.60	43.4	15.76	56.0	15.24	59.7	60.24	74.0
	9	43.4	22	17	5	. 7	II	10
. 30	38.51	44.5	15.54	57.7	15.19	60.4	60.13	75.6
Juni 9	38.40	45.2	15.30 25	59.1	15.12 8	61.1	60.00	76.9
19	38.28	45.6	15.05	60.0	15.04 9	61.8	59.85	77.9
T 1: 29	38.14	45.6	14.78	60.4	14.95	62.4 6	59.70 16	78.0
Juli 9	37.99	45.3	14.51	60.3	14.86	63.0	59.54	78.8
19	37.83	44.7	14.24	50.8	14.76	62.5	50.28	78.7
29	37.68	12.7	13.99	58.8	14.66	63.9	50.22	78.2 5
Aug. 8	37.53	42.5	13.75	57.3	14.57 8	64.1	50.08	77.3 9
18	37.40	41.1 16	13.54	55.4 22	14.49	64.2	58.95	76.T
28	37.29	39.5	13.36	53.2	14.42	64.2	58.85	74.4
Sept. 7	37.21	27 7	13.22	50.5	14.37	64.0	58.77	72.5
17	37.17	37.7 18	13.12	47.6 29	14.35 -	63.6	58.72 5	70.3
27	27 17	35.9 ₁₇ 34.2 ₁₈	13.08 4	44.3 33	14.36	63.0	58.71	678 3
Okt. 7	37.23	32.4	13.10	40.8 35	14.40	62.I 9	58.71	650
17	37·25 12 37·35	31.0	13.19	36.9 39	14.50	60.8	758.83	61.8
	17	12	16	36	14	14	14	31
27	37.52 24	29.8	13.35	33.3 37	14.64	59.4 16	58.97 19	58.7
Nov. 6	37.76	29.0	13.58	29.0	14.82	57.8 18	59.16	55.4 32
16	J T 22	28.0	13.88 26	20.1	15.05 26	56.0 21	59.40	52.2
26	30.37 28	28.7 6	14.24	44.0	15.31	53.9 22	59.09 22	49.1
Dez. 6	38.75	29.3	14.65	19.8 27	15.61 32	51.7	60.02 37	46.2
16	30.14	30.3	15.12	17.1	15.93	49.5 23	60.39	43.5 24
2 6	30.56	31.7	15.61 49	15.0	16.26 33	47.2 22	60 78 39	ATT
36	39.97	33.5	16.13	13.3	16.60 ³⁴	45.0	61.17 39	39.2
Mittl. Ort	36.75	21.6	12.34	54.7	13.23	71.9	57.62	76.8
sec ð, tg ð	1.300	-0.831	1.809	+1.507	1.002	+0.068	1.283	+0.804
- 7, 6	J) - /				,

AR. 12 ^h 52 ^m 1.90 66 2.56 65 3.21 61 3.82 57 4.39 50 4.89 41 5.30 32 5.62 23 5.85 12 5.97 3 6.00 3 6.00 6 5.94 15 5.79 21 5.58 28 5.30 34	Dekl. + 65° 53′ 76.6 12 75.4 5 74.9 5 75.1 7 75.8 14 77.2 18 79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25 97.7 33	AR. 12 ^h 57 ^m 50.65 51.00 35 51.33 32 51.65 29 51.94 25 52.19 22 52.41 18 52.59 14 52.73 11 52.84 6 52.90 4 52.94 1	Dekl. + 25' 28.6 21 26.5 18 24.7 16 23.1 13 21.8 9 20.9 5 20.4 1 20.8 6 21.4 8	AR. 13 ^h 5 ^m 26.31 26.65 34 26.99 31 27.30 29 27.59 26 27.85 23 28.28 18 28.26 15 28.41 11 28.52 8	5° 4' 3°.7 22 32.9 21 35.° 19 36.9 18 38.7 16 40.3 14 41.7 10 42.7 9 43.6 6 44.2 3	AR. 13 ^h 7 ^m 48.87 37 49.24 36 49.60 35 49.95 31 50.26 29 50.55 24 50.79 20 50.99 16 51.15 11 51.26	Dekl. + 28° 18′ 55.3 20 53.3 15 51.8 11 50.7 7 7 50.0 1 49.9 3 50.2 7 50.9 14
1.90 66 2.56 65 3.21 61 3.82 57 4.39 50 4.89 41 5.62 23 5.85 23 5.97 3 6.00 3 6.00 3 6.00 3 5.79 21 5.58 28 5.30	76.6 12 75.4 5 74.9 5 75.8 7 75.8 14 77.2 18 79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25	50.65 51.00 33 51.33 32 51.65 29 51.94 25 52.19 22 52.41 18 52.59 14 52.73 11 52.84 6 52.90 4	28.6 21 26.5 18 24.7 16 23.1 13 21.8 9 20.9 5 20.4 1 20.3 1 20.4 4 20.8 6 21.4 8	26.31 26.65 34 26.99 31 27.30 29 27.59 26 27.85 28.08 18 28.26 15 28.41 11 28.52 8	3°.7 22 32.9 21 35.0 19 36.9 18 38.7 16 40.3 14 41.7 10 42.7 9 43.6 6 44.2 3	48.87 49.24 36 49.60 35 50.26 29 50.55 24 50.79 20 50.99 16 51.15 11 51.26	55.3 20 53.3 15 51.8 11 50.7 7 50.0 1 49.9 3 50.2 7 50.9 10 51.9 14
2.56 65 3.21 61 3.82 57 4.39 50 4.89 41 5.30 32 5.62 23 5.85 12 5.97 3 6.00 6 5.94 15 5.79 21 5.58 28 5.30	75.4 5 74.9 5 75.1 7 75.8 7 77.2 18 79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25 97.7 25	51.00 35 51.33 32 51.65 29 51.94 25 52.19 22 52.41 18 52.59 14 52.73 11 52.84 6	26.5 18 24.7 16 23.1 13 21.8 9 20.9 5 20.4 1 20.3 1 20.4 4 20.8 6 21.4 8	26.65 34 26.99 31 27.30 29 27.59 26 27.85 23 28.08 18 28.26 15 28.41 11 28.52 8	32.9 21 35.0 19 36.9 18 38.7 16 40.3 14 41.7 10 42.7 9 43.6 6 44.2 3	49.24 37 49.60 35 49.95 31 50.26 29 50.55 24 50.79 20 50.99 16 51.15 11 51.26	53.3 15 51.8 15 50.7 7 50.0 1 49.9 3 50.2 7 50.9 16 51.9 14
2.56 65 3.21 61 3.82 57 4.39 50 4.89 41 5.30 32 5.62 23 5.85 12 5.97 3 6.00 6 5.94 15 5.79 21 5.58 28 5.30	75.4 5 74.9 5 75.1 7 75.8 7 77.2 18 79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25 97.7 25	51.00 35 51.33 32 51.65 29 51.94 25 52.19 22 52.41 18 52.59 14 52.73 11 52.84 6	26.5 18 24.7 16 23.1 13 21.8 9 20.9 5 20.4 1 20.4 4 20.8 6 21.4 8	26.65 34 26.99 31 27.30 29 27.59 26 27.85 23 28.08 18 28.26 15 28.41 11 28.52 8	32.9 21 35.0 19 36.9 18 38.7 16 40.3 14 41.7 10 42.7 9 43.6 6 44.2 3	49.24 37 49.60 35 49.95 31 50.26 29 50.55 24 50.79 20 50.99 16 51.15 11 51.26	53.3 15 51.8 15 50.7 7 50.0 1 49.9 3 50.2 7 50.9 16 51.9 14
3.21 61 3.82 61 4.39 57 4.89 41 5.62 23 5.85 12 5.97 3 6.00 3 6.00 3 6.00 3 5.79 21 5.58 28 5.30	74.9 - 2 75.1 7 75.8 14 77.2 18 79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25 97.7 25	51.33 32 51.65 29 51.94 25 52.19 22 52.41 18 52.59 14 52.73 11 52.84 6	24.7 16 23.1 13 21.8 9 20.9 5 20.4 1 20.3 1 20.4 4 20.8 6 21.4 8	27.59 31 27.59 26 27.85 23 28.08 18 28.26 15 28.41 11 28.52 8	35.0 19 36.9 18 38.7 16 40.3 14 41.7 10 42.7 9 43.6 6 44.2 3	49.60 35 49.95 31 50.26 29 50.55 24 50.79 20 50.99 16 51.15 11 51.26	51.8 11 50.7 7 50.0 7 50.2 7 50.9 7 51.9 14
3.82 57 4.39 50 4.89 41 5.62 23 5.85 12 5.97 3 6.00 3 6.00 3 6.00 3 5.79 21 5.58 28 5.30	75.1 7 75.8 7 77.2 18 79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25	51.65 ³² 51.94 ²⁵ 52.19 ²² 52.41 ¹⁸ 52.59 ¹⁴ 52.73 ¹¹ 52.84 ⁶ 52.90 ⁴	23.1 13 21.8 9 20.9 5 20.4 1 20.3 1 20.4 4 20.8 6 21.4 8	27.30 31 27.59 29 27.85 23 28.08 18 28.26 28.41 11 28.52 8	36.9 19 38.7 16 40.3 14 41.7 10 42.7 9 43.6 6 44.2 3	49.95 31 50.26 29 50.55 24 50.79 20 50.99 16 51.15 11	50.7 50.0 49.9 50.2 50.9 51.9
4.39 57 4.89 41 5.30 32 5.62 23 5.85 12 5.97 3 6.00 3 6.00 3 5.94 15 5.79 21 5.58 28 5.30	75.8 7 77.2 18 79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25	51.94 25 52.19 22 52.41 18 52.59 14 52.73 11 52.84 6 52.90 4	21.8 ¹³ 20.9 5 20.4 1 20.3 1 20.4 4 20.8 6 21.4 8	27.59 26 27.85 23 28.08 18 28.26 15 28.41 11 28.52 8	38.7 16 40.3 14 41.7 10 42.7 9 43.6 6 44.2	50.26 34 50.55 24 50.79 20 50.99 16 51.15 11 51.26	50.0 1 49.9 3 50.2 7 50.9 10 51.9 14
4.89 41 5.30 32 5.62 23 5.85 12 5.97 3 6.00 6 5.94 15 5.79 21 5.58 28 5.30	77.2 18 79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25	52.19 22 52.41 18 52.59 14 52.73 11 52.84 6 52.90 4	20.9 5 20.4 1 20.3 1 20.4 4 20.8 6 21.4 8	27.85 28.08 ²³ 28.26 ¹⁸ 28.41 ¹¹ 28.52 ⁸	40.3 14 41.7 10 42.7 9 43.6 6 44.2 3	50.55 24 50.79 20 50.99 16 51.15 11 51.26	49.9 3 50.2 7 50.9 10 51.9 14
5.30 32 5.62 23 5.85 12 5.97 3 6.00 3 6.94 15 5.79 21 5.58 28 5.30	79.0 23 81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25	52.41 18 52.59 14 52.73 11 52.84 6 52.90 4	20.4 5 20.3 1 20.4 4 20.8 6 21.4 8	28.08 18 28.26 15 28.41 11 28.52 8	41.7 10 42.7 9 43.6 6 44.2 3	50.79 20 50.99 16 51.15 11 51.26	50.2 7 50.9 10 51.9 14
5.62 32 5.85 12 5.97 6.00 3 6.00 3 6.00 15 5.79 21 5.58 28 5.30	81.3 26 83.9 28 86.7 30 89.7 28 92.5 27 95.2 25	52.59 14 52.73 11 52.84 6 52.90 4	20.3 -1 20.4 4 20.8 6 21.4 8	28.26 15 28.41 11 28.52 8	42.7 9 43.6 6 44.2 3	50.99 16 51.15 11 51.26	50.9 10
5.85 ²³ 5.97 3 6.00 3 6.00 6 5.94 15 5.79 21 5.58 28 5.30	83.9 28 86.7 30 89.7 28 92.5 27 95.2 25	52.73 11 52.84 6 52.90 4	20.4 20.8 4 20.8 6 21.4	28.41 15 28.52 8	43.6 6 44.2 3	51.15 11	51.9
5.97 6.00 3/6 5.94 15 5.79 21 5.58 28 5.30	86.7 30 89.7 28 92.5 27 95.2 25	52.84 6 52.90 4	20.8 6	28.52	44.2	51.26	14
6.00 $\frac{3}{6}$ 5.94 15 5.79 21 5.58 28 5.30	89.7 ₂₈ 92.5 ₂₇ 95.2 ₂₅	52.90 52.01	21.4 8	8	3		
5.94 15 5.79 21 5.58 28 5.30	89.7 ₂₈ 92.5 ₂₇ 95.2 ₂₅	52.90 52.04	21.4 8			7	53.3
5.94 5.79 21 5.58 28 5.30	92.5 95.2 97.7	52.94		40.00	11.5	51.33	54.0
5.79 21 5.58 28 5.30	95.2 25	- I	22.2	28.65	44.7 =	51.37	56.6
5.58 ₂₈ 5.30	07.7	52.05 -	22.2	28.68	11.6	51.27	58.4 18
5.30		52.93	24.2	28.67	444	51.34 6	60 2
21	99.9	52.89	25.1	28.65	44.1 3	51.28	61.8
106 34	18	5	10	4	3	7	60 1
4.96	101.7	52.84 8	26.1	28.61	43.8	51.21 10	63.4
4.60 39	103.0 8	52.76 8	27.0 8	28.55	43.3 5	51.11	64.7
4.21	103.8	52.68	27.8	28.47 8	42.8	51.00 12	65.8 8
3.80	104.0 -	52.59 10	28.5 6	28.39	42.3 6	50.88	66.6
3.39	103.8	52.49	29.I 4	28.30	41.7	50.76	67.2
208	IO3.I	52.39	29.5	28.20	41.2 6	50.62	67.4
2.60 38	101.8	52.28	20.7	28.10	40.6	50.49	67.3
2.24 36	100.1	52.19	29.8 -	28.00	40.1	50.36	66.0
1.92 32	98.0 21	52.10 8	20.6	27.91 8	39.7	50.25	66.2
1.64	20	52.02	29.3		3	50.14	65.2
22	29	5	6	5	3	8	14
10	- 33	3	. 0	- 4		5	63.8
. 8	- 25	- 0		0		- 2	60.2
I	- 1/		13	3	3	2	58.0
9	41	0 9		11 12	/	112	
1.20	77.9	13	23.8	27.80	40.1	50.00	55.4
1.44 26	74.0	52.20	22.C	27.00	40.9	FOTO	52.7 2
T 170	70.2	52.37	10.0	28.16	42.0	EO 25	49.9 20
2.00	66.7	52.50	17.7	28.38	12.4	50.57 25	47.0 20
2.50	03.3	52.85	T5.4 -3	28.64	45.0	50.82	44.1
3.02	60.3	53.14	13.0	28.93	46.9	51.12	41.2
2 60	25	32	24	32	20	ST.45	28 5
1.00		53.40	2.4				26.1
OK	- 7		2.2	11			34.0
4.0/	54.4	54.14	0.0	49.93	33.4	54.1/	34.0
0.96	97.0	50.77	35.5	26.63	29.3	48.89	68.0
	1.64 22 16 1.26 8 1.18 1.17 9 18 1.44 26 1.70 36 2.06 44 2.50 52 3.02 58 3.60 62 4.87	1.64 25 95.4 29 1.42 16 92.5 33 1.26 8 89.2 35 1.17	1.64 22 95.4 20 52.02 5 1.42 16 92.5 33 51.97 3 1.26 8 89.2 35 51.94 0 1.17 9 82.0 37 51.98 4 1.17 9 77.9 37 51.98 4 1.70 36 74.0 37 52.20 17 1.70 36 66.7 34 52.85 26 2.06 44 66.3 30 52.85 29 3.02 58 25 53.46 34 4.22 65 55.7 15 53.80 34 4.87 54.2 54.14 50.77	1.64 25 95.4 20 52.02 29.3 3 1.42 16 92.5 33 51.97 3 27.9 11 1.18 85.7 37 51.94 26.8 13 1.17 9 82.0 37 51.98 4 25.5 17 1.26 74.0 37 75.2.7 9 23.8 18 1.44 26 74.0 37 52.27 22 21 1.70 36 66.7 34 52.85 29 17.7 23 2.50 52 60.3 30 30 30 15.4 24 3.00 62 57.8 21 53.46 34 8.2 24 4.22 65 55.7 15 54.2 54.14 8.2 22 0.96 97.0 50.77 35.5	1.64 22 95.4 20 52.02 29.3 3 27.83 5 1.42 16 92.5 33 51.97 3 27.9 11 27.74 0 1.18 85.7 37 51.94 0 26.8 13 27.74 0 27.74 0 1.17 9 82.0 41 52.07 9 23.8 17 27.77 3 27.77 3 27.77 3 27.77 3 1.77 3 27.99 17 23.8 18 13 27.99 17 27.86 9 27.77 3 17.77 3 27.79 17 27.86 9 27.77 3 17.77 3 27.79 17 27.86 9 27.79 17 27.86 9 27.79 17 27.86 9 27.79 17 27.86 9 27.79 17 27.86 9 28.16 22 22.02 21 27.99 17 23.88 26 26.64 29 28.38 26 26.64 29 <td>1.64 22 95.4 20 52.02 29.3 3 27.83 39.4 3 1.42 16 92.5 33 51.97 28.7 8 27.78 4 39.1 1 1.18 85.7 37 51.94 26.8 13 27.74 39.0 1 1.17 9 41 51.98 9 25.5 17 27.77 39.4 39.1 3 1.26 77.9 39 13 18 27.99 17 27.86 9 27.77 9 39.4 7 40.1 8 13 39.4 7 40.1 8 13 39.4 3 39.4 3 39.4 3 39.1 1 39.0 1 3 27.77 3 39.1 3 39.1 3 27.77 9 27.86 9 27.77 9 27.86 9 27.99 17 27.86 9 27.99 17 28.36 27.99 17 28.38 26 40.1 8 27.99 17 28.3</td> <td>1.64 22 95.4 20 52.02 29.3 3 27.83 39.4 3 50.14 8 1.42 16 92.5 33 51.97 3 28.7 8 27.78 39.1 50.06 5 5 50.01 2 8 27.78 4 39.1 50.06 5 5 50.01 2 27.74 39.0 1 50.06 5 5 50.01 2 27.74 39.0 1 49.99 2 1 49.99 2 1 49.99 2 2 27.77 9 39.4 7 1 50.01 2 2 27.77 9 39.4 7 1 50.01 2 2 27.77 9 39.4 7 1 50.01 2 2 27.77 9 39.4 7 1 50.01 7 2 28.8 1 39.4 7 1 50.01 7 2 28.16 2 27.99 17 40.9 11 50.05 1 50.05 2 28.16</td>	1.64 22 95.4 20 52.02 29.3 3 27.83 39.4 3 1.42 16 92.5 33 51.97 28.7 8 27.78 4 39.1 1 1.18 85.7 37 51.94 26.8 13 27.74 39.0 1 1.17 9 41 51.98 9 25.5 17 27.77 39.4 39.1 3 1.26 77.9 39 13 18 27.99 17 27.86 9 27.77 9 39.4 7 40.1 8 13 39.4 7 40.1 8 13 39.4 3 39.4 3 39.4 3 39.1 1 39.0 1 3 27.77 3 39.1 3 39.1 3 27.77 9 27.86 9 27.77 9 27.86 9 27.99 17 27.86 9 27.99 17 28.36 27.99 17 28.38 26 40.1 8 27.99 17 28.3	1.64 22 95.4 20 52.02 29.3 3 27.83 39.4 3 50.14 8 1.42 16 92.5 33 51.97 3 28.7 8 27.78 39.1 50.06 5 5 50.01 2 8 27.78 4 39.1 50.06 5 5 50.01 2 27.74 39.0 1 50.06 5 5 50.01 2 27.74 39.0 1 49.99 2 1 49.99 2 1 49.99 2 2 27.77 9 39.4 7 1 50.01 2 2 27.77 9 39.4 7 1 50.01 2 2 27.77 9 39.4 7 1 50.01 2 2 27.77 9 39.4 7 1 50.01 7 2 28.8 1 39.4 7 1 50.01 7 2 28.16 2 27.99 17 40.9 11 50.05 1 50.05 2 28.16

					1			
1913	495) γ I	Hydrae.	496) i C	entauri.	497) ζ Urs	. maj. pr.	498) α V	irginis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	13 ^h 14 ^m	22° 42'	13" 15"	36° 15′	13 ^h 20 ^m	55° 22′	13 ^h 20 ^m	10° 42′
Jan. o	10.76	42.0 20	41.26	4.7 18	25.75 50	26.4	35.99 34	27.I 21
IO	11.13	44.0	41.07	6.5	26.25	24.7	30.33	29.2
20	11.49	46.2	42.00	8.6	26.74 48	23.6	30.07	31.3 20
Kabu a	11.82	48.4 22	42.43	10.9 25	27.22 45	23.1	37.00	33.3 20
Febr. 9	12.13	50.6	42.77	13.4	27.67	23.2	37.30	35.3
19	12.41	52.8	43.08	15.9	28.08	24.0	37.57	37.0 16
März 1	12.65	54-9 10	43.35 22	18.5	28.44	25.3	37.81	38.6
11	12.86	56.8	43.57	21.0	28.73	27.0	38.01 ₁₇	40.0
2.1	13.03	58.6 16	43.76	23.4	28.95 16	29.2	38.18	41.1
31	13.16	60.2	43.90	25.7	29.11	31.7	38.30	42.0
April 10	13.25	61.6	44.01 6	27.9 20	29.20	34.3 28	38.40	42.7
20	13.31	62.8	44.07	29.9 17	29.22	37.I 27	38.47	43.1
30	13.35	63.8	44.11	31.6	29.18	39.8 27	38.51	43.4 3
Mai 10	13.35	64.6	44.11	33.2	29.09	42.3 24	38.52	43.6
20	13.34	65.2	44.08	34.5	28.95	44.7	38.51	43.5
30	13.30	65.6	44.03	35.5	28.78	46.7	38.48	43.4
Juni 9	13.24	65.8 2	43.95	36.2	28.57	48.1	28 12 5	43.1
19	13.16	65.8	43.85	36.6	28.33 26	49.6 8	28 27	42.8
29	13.06	65.6	43.73	36.8	28.07 26	50.4	38.28	42.4
Juli 9	12.96	65.2	43.59	36.6	27.81	50.7	38.19	41.9
19	12.85	64.7	43.45	36.2	27.54	50.6	38.09	41.3
29	12.72	64.0 7	43.30	35.5	27 27 -/	40.0	27.08	107
Aug. 8	12.61	63.1 9	43.15	24.5	27.0T	48.0	27 88	40 T
18	12.50	62.2	43.01	33.4	26.76	47.3	37.77	30.5
28	12.41	61.3	42.89	32.0	26.55	45.3	37.68	39.0
Sept. 7	12.34	60.3	42.79	30.5	26.36	12.0	37.61	38.5
17	12.29	59.3	42.72	29.0	26.22	40.I	37.56	38.2
27	12.28	58.4	42.70 -	27.4	26.12	37.I 30		270 3
Okt. 7	12.30	57.7	42.72	25.9	26.08 4	33.8 33	37.55 - 37.57 - 37.57	37.9
17	1312.39	57.1	42.81	24.5	15 _{26.11} 3	29.9	37.64	38.2
	13	2	13	10	10	37	11	4
Nov. 6	12.52 12.69	56.9 56.9	42.94	23.5	26.21	26.2	37.75 17	38.6
16	23		43.14	22.8 4	26.38 26.62	22.5 36 18.9	37.92	39.4 10
26	12.92 13.19	57·3 8 58.1	43.39 30	22.4	26.93	35	38.13 ²⁵ 38.38 ²⁵	40.4
Dez. 6	13.50 31	59.2	43.69 34	22.9 5	20.93 27.30 ³⁷	15.4 33	38.66	41.7 16
	34	14	37	8	42	30	32	18
16	13.84 36	60.6	44.40	23.7	27.72 46	9.1	38.98	45.1
26	14.20	62.2	44.80	25.0 17	28.18	6.6	39.32	47.0 20
36	14.56	64.1	45.20	26.7	28.67	4.6	39.67	49.0
Mittl. Ort	11.34	46.4	42.06	13.3	25.51	46.0	36.45	27.I
seco, tgo	1.084	-0.419	1.240	0.500	1.760	1.448	1.018	-0.189

-	499) G	r. 2001.	500) 69 II.	Urs. maj.	501) ζ V	irginis.	502) 17 H.	Can.ven.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	13 ^h 23 ^m	72° 49′	13 ^h 25 ^m	60° 22'	13 ^h 30 ^m	o° 9′	13 ^h 30 ^m	37° 37′
Jan. o	55.59 85	73.1	15.91	81.1	15.12	9.3	54.72	24.2
10	56.44 84	71.7 8	16.46 55	79.4	$15.46 \frac{34}{33}$	11.5 20	55.11	22.1
20	57.28	70.9	17.02	78.4	15.79 32	13.5	55.50 78	20.5
30	58.11	70.9 6	17.50	78.0 -	16.11	15.3 17	55.88	19.4
Febr. 9	58.90	71.5	18.06	78.2	16.41	17.0	56.23	18.9
19	59.61 61	72.6	18.52	79.0	16.69	18.4	56.55 29	18.9
März 1	60.22	74.4	18.92	80.5	16.93	19.5	56.84	19.5
11	60.73	76.6	19.25 33	82.4	17.14	20.3	57.08 19	20.5
21	61.10	70.2	TOFT	84.7 26	17.31	20.8	57.27	21.9
31	61.34	82.1	19.69	87.3	17.44	21.1	57.41	23.7
April 10	61.45	85.1	TO.78	90.1 ₂₈	17.55	21.1	57.52	25.7
20	61.42	88.1	1080	92.9 28	17.62	20.9	57.57 5	27.9 22
30	61.27	OTT	10.75	05.7	17.66	20.6	57.59 =	30.1
Mai 10	61.01 26	008 '	10.64	98.4 24	$17.68 - \frac{2}{1}$	20.1 5	57.57 6	32.3
20	60.65	96.2	19.47	8,001	17.67	19.6	57.51 8	34-3
30	60.20	08.3	TO 25	102.9	17.65	10.0	57.42	36.2
Juni 9	59.69	00.0	18.00	104.6	17.60 6	18.3	57.22	37.8
19	59.12 61	101.0	18.70	105.9	17.54 8	17.6	57.20	20 T
29	58.51 63	/	18.30	106.7	17.46	17.0	57.05	40.2
Juli 9	57.88	101.7	18.06 33	107.0	17.37	16.4	56.90	40.8
19	57.25	TOTA	17.73	106.8	17.27	15.9	56.73	41.0
29	1660	100.2	17.40 33	106.1	17.16	15.4	56 56	40.9
Aug. 8	56.02	087 15	17.08 32	105 0	17.05	15.0 4	56.40	40.4
18	55.47	06.7	16.78 3°	102.3	16.95	14.7	56.25	20.1
28	54.97	94-3	16.51	101.2	16.86	14.6	56.10	38.1
Sept. 7	64.54	OT 4	16.28	98.7	16.78	14.6	12	10
17	54.54 36 54.18	88.2	16.00 19	95.8 29	16.72 6	14.7	55.89 9	36.5
27	53.01 T	84.7 35	15.96	93.6 32	2	TET 4	FF 80	34.5 2
Okt. 7	53.76	81.0 3/	15.80	80.2 34	16.70	T 5 77	rr &r	20.5
17	1653.72	76.8 42	15.90	85.2	16.76	16.5	55.84 3	26.6
		39	9	38	17 10	12	18 9	3
Nov. 6	53.81	72.9 69.0	15.99 16	81.4 38	16.86	17.7	55.93 14	23.3
16	54.03 54.37		16.15 16.40	77.6 37	17.01		56.07 19	16.9
2 6	54.84	65.2 35	16.72 32	73.9 36	17.20	20.7	56.26 25 56.51 20	13.6
Dez. 6	55.41	58.4 33	17.12 40	70.3 67.0	17.44 ²⁷	22.5 24.5	56.80	10.5
	00	28	40	30	30	20	34	3
16	56.09 76	55.6	17.58	64.0	18.01	26.5	57.14 36	
2 6	56.85 8	53.3	18.08	01.5	18.34	28.7	57.50	4.9 2
36	57.66	51.6	18.62	59.6	18.68	30.9	57.88	2.6
Mittl. Ort	54.86	95.0	15.63	101.6	15.53	5.3	54.81	40.1
sec 8, tg 8	3.390	+3.239	2.024	-1 -1.759		-0.003	1	+0.77

	504) ε (entauri.	507) τ	Bootis.	509) η Ui	rsae maj.	510) 89	Virginis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	13 ^h 34 ^m	53° 1'	13 ^h 43 ^m	17° 52'	13 ^h 44 ^m	49° 44′	13 ^h 45 ^m	17" 42'
Jan. o	20.62	16.3	7.33 35	73.4 22	6.78	30.7	7.81	2.7
10	21.13	18.0	7.08	71.2	7.22	28.7	8.17	4.6
20	21.63 48	20.0	8.02	69.2 16	7.07	27.2	8.52	6.6
Febr. 9	22.11	22.4	8.35 32 8.67	67.6	8.10	26.0	9.18	8.6
	22.56	25.1	29	8	8.53	3	9.10	10.6
19	22.96	28.0	8.96 26	65.7	8.91	26.3	9.47 27	12.5
März 1	23.33	30.9 31	9.22	65.4	9.25 29	27.2	9.74	14.3 16
11	23.64 26	34.0	9.44 18	65.4	9.54 23	28.6	9.97	15.9
21 31	23.90 24.11	37.0 29	15	65.9 7 66.6	9.77	30.5 22	10.16	17.3
	15	39.9	9.77	11	9.95	32.7	12	10
April 10	24.26	42.7	9.88 8	67.7	10.07	35.2 26	10.44	19.6
20	24.37 6	45.4	9.96	68.9	10.14	37.8 26	10.54 7	20.5
Mai 10	24.43	47.8	10.00	70.2 15	TO TT	40.4 26	10.64	21.2
20	24.43 24.40	49.9 18	10.01	73.1	10.03	43.0 45.5	10.65	22.0 3
	7	16	3	14	12	21	1	2
30	24.33	53.3	9.98 6	74.5	9.91 16	47.6	10.64	22.2
Juni 9	24.21 24.06	54.4 8	9.92 9.85 ⁷	75.8 176.9	9.75	49.5	TO 55	22.2
19 29	23.89	55.2	9.76	77.9	9·57 9·37	52.1	10.47	21.9
Juli 9	23.68	55.7 °	9.65	78.6	9.15	5 2.8 7	10.38	21.6
	23	4	11	6	23	2	11	4
19	23.45	55.3 7	9.54	79.2	8.92 8.68 ²⁴	53.0 52.8	10.27	21.2
Aug. 8	23.22	54.6	9.42	79·5 79·5	8.45	52.1 7	10.10	20.0
18	22.76 23	53.4	9.17	79.3 2	8.22	50.0	0.02	10.3
28	22.56	50.3	9.05	78.8	8.01	49.3	9.81	18.6
~	18	48.3	8.96	78.0	7.83	20	9	7
Sept. 7	22.38 22.26	46.2	8.88	77.0	7.68	47·3 44·9	9.72	17.9 17.2
27	22.17	44.1	8.83 5	75.6	7.56	44.9 27	0.61	16.7
Okt. 7	22.16	42.0	8.82	74.0	7.50	39.2	9.61	16.2
17	22.21	40.0	8.85	72.2	7.49	35.9 33	9.65	16.0
27	22.36	38.0	8.93	69.9	21 6	22.0	9.75	16.0
Nov. 6	22.57	36.6	0.05	67.5 24	7.55 12 7.67	28 4 30	0.80	16.2
16	22.86	25.5	9.23	65.0 23	7.86	24.8	10.08	168
26	23.21 35	34.9	9.45 26	62.4 26	8.11	21.3	10.32 28	17.6
Dez. 6	23.63	34.8	9.71	59.8	8.42	17.9	10.60	18.8
16	24.08	35.2	10.01	57.1 ²⁷	8.78	14.7	10.92	20.2
26	24 == 49	36.1 °	10.22	54.6	0.18	12.0	TT.25 33	218 10
36	25.08 51	37.5	10.67 34	52.3	9.61 43	9.7	11.60 35	23. 6 18
Mittl. Ort	22.00	28.1	7.67	83.9	6.86	49.7	8.50	4.1
sec 8, tg 8		1.329		+0.323		-1-1.181	1.050	-0.319

7070	512) ζ C	entauri.	513) η	Bootis.	516) τ V	irginis.	517) 11	Bootis.
1913	AR.	Dekl.	AR.	Dekl.	AR	Dekl.	AR.	Dekl.
	13 ^h 50 ^m	46° 51′	13 ^h 50 ^m	18° 49′	13 ^h 57 ^m	1° 57′	13 ^h 57 ^m	27° 47′
Jan. o	5.00 46	28.1	32,16	49.4 23	12.51	48.6	13.47 36	69.2
10	5.46	29.3	32.50 34	47.I 20	12.85	46.5 20	13.83	00.0
20	5.92	31.0	32.85	45.1 16	13.18	44.5	14.10 36	65.0
Febr. 9	6.36 42	32.9 22	33.19	43-5 11	13.51	42.6	14.54	63.5
reor. 9	6.78	35.1	33.51	42.4	13.83	41.0	14.88	62.5
19	7.16	37.5 26	33.80	41.6	14.12 26	39.7 10	15.19 28	62.0
März 1	7.51	40.I ₂₆	34.07	41.3	14.38	38.7 7	15.47	62.0
11	7.81 26	42.7	34.30 19	41.3	14.60 20	38.0 4	15.71	02.5
21	8.07	45.4 27	34.49 15	41.8 8	14.80 16		15.92 16.08	63.4
31	17	48.1	34.64	42.0	14.96		13	64.6
April 10	8.45	50.7 24	34.76	43.7	15.09 10		16.21	66.2
20	8.57	53.I ₂₃	34.85	44.9	15.19	37.9	16.30	67.9 19
Mai 10	8.66	55.4 22	34.90 2	46.4	15.26	38.5 6	16.35	69.8
Mai 10	8.70	57.6	34.92	47.8	15.30	39.1	16.37 - 16.36	71.7
	8.70	59.5	34.92	49.3	15.32		3	73.6
. 30	8.66	61.1	34.89	50.7	15.31	40.6	16.33	75.4 16
Juni 9	8.59	62.4	34.84	52.1	15.28	41.4	10.20	77.0
19	8.49	63.5 7	34.77	53.3 10	15.23	42.1	16.18	78.5
Juli 9	8.35 16	64.2	34.68	54.3 8	15.16	42.8 7	16.07	79.6
Juli 9	8.19	64.6	34.57	55.1	15.07	43.5	15.95	80.5
19	8.01	64.6	34.46	55.6	14.98	44.1	15.81	81.0
29	7.81	64.2	34.33	55.9	14.87	44.0	15.67	81.3
Aug. 8	7.62	63.5 10	34.20	56.0	14.75	44.9	15.52	81.2
18 28	7.42 19	62.5	34.08		14.64		15.38	80.8
	7.23	61.2	33.96	55.3	14.53	45.3	15.24	80.0
Sept. 7	7.08	59.6	33.86	54.5	14 43	45.2	15.12	78.9
17	0.95	57.8 18	33.77	53.4	14.35	45.0	15.01	77.4
()]-4 =	1 3	56.0 19	33.72	52.0 16	14.30	44.5	14.94	75.7 2
Okt. 7	4	54.1 18	33.70	50.4 19		43.8		73.6
17	23 12	52.3	233.72	48.5	14.31	42.9	14.91	71.3
27	17	50.4	33.79	46.1	14.38	41.6	14.97	68.5
Nov. 6	7.17	49.0	33.91	43.7 25	14.50	40.2	15.07	65.7
16	7.41	47.9 8	34.08	41.2	14.67	38.5 18	15.23	62.8
1)07 6	1.74 26	47.1	34.29	38.6 28	14.88	36.7 20	15.44	59.7
Dez. 6	40	40.0	34.55	35.8	15.13	34.7	15.70	50.7
16	8 48	16.0	34.84	33.1	15.42	32.5 22	15.99	53.8
26	45	47.4	35.10	30.0	15.74	30.3	16.32	51.1
36	9.37	48.4	35.50	28.2	16.07	28.2	16.66	48.7
Mittl. Ort	6.29	38.0	32.54	60.3	13.07	54-3	13.83	83.0
sec 8, tg 8	1.463	-1.067	1.056	+0.341	1.001	-1-0.034	1.130	+0.52

	518) β C	entauri.	520) 1 C	entauri.	521) a Di	raconis.	522) d I	Bootis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
The last	13 ^h 57 ⁿ	59° 57′	14 ^h 1 ^m	35° 56′	14 ^h 2 ^m	64° 46′	14 ^h 6 ^m	25° 29′
Jan. o	38.47 58	1.7 8	32.34	26.5	1.81	67.6	25.47	58.8
10	39.05 59	2.5	32.74 40	27.9 17	2.40 61	65.5	25.82 35	56.4
20	39.64 57	3.7	33.14 39	29.6	3.01	64.1	26.17 35	54.5 16
30	40.21 54	5.4 21	33.53 37	31.5	3.62	63.4	26.52	52.9
Febr. 9	40.75	7.5	33.90	33.6	4.21	63.3	26.86	51.8
19	AT 26	10.0 26	34.24	35.7	4.76	63.8	27.17 28	51.2
März 1	41.72	12.6	34·55 ₂₈	38.0 23	5.26	65.0	27.45	51.1
11	42.12	15.5 30	34.83	40.2	5.69 43	66.7 17	27.70 21	51.4 8
21	42.47 35	18.5 30	35.07 20	42.4 22	6.04 35	68.9 26	27.91	52.2
31	42.75	21.5	35.27	44.6	6.31	71.5	28.08	53.3
April 10	42.98	24.6	35.43	46.6 vo	6.49	74.3	28.22	54.7
20	43.15	27.6	35.56	48.5	6.57	77 2	28.32 6	562
30	43.25	20.5	25.65	50.2	6.58	80.3	28.38	58.1
Mai 10	42.30	33.2 26	35.71	51.8	6.50	82.2	28.42	50.0
20	43.29	35.8	35.73	53.2	6.34	85.9	28.42	61.8
30	43.22	38.0	1	11	6.12	88 4	28.39	63.6
Juni 9	43.10	20.0	35.72 35.69 3	54·3 9	5.84	00.5	28 24	65.2
19	12.03	4T.5	35.62	55.9	5.51 33	02.T	28.26	66.6
29	42.72	12 7	35.53	56.4	5.14 3/	02.2	28.17	67.8
Juli 9	42.47 25	43.5	35.41	56.5	4.74	95·5 8 94.I	28.05	68.7
	28	4	13	1	41	2	13	69.4
19 29	42.19 29	43.9 1	35.28	56.4 56.1 3	4.33	94.3	27.92	69.7
Aug. 8	41.59	43.0 6	35.13 ₁₆ 34.97 ₁₆	255	3.90 42 3.48 42	94.0 8	27.79 15 27.64	69.7
18	41.29	42.3	34.81	55.5 9	3.07	01.8	27.50	60.4
28	41.00	40.9	34.66	53.6	2.68 39	90.0	27.36	68.8
	25	17	14	12	36	23	13	10
Sept. 7	40.75 20	39.2	34.52 10	52.4	2.32	87.7	27.23	67.8
17 27	40.55	37.2	34.42 8		2.02	85.0 82.0	27.12 8 27.04	64.9
Okt. 7	40.41	35.0 24 32.6 24	34.34	49.7	1.77 18	H8 6 34	27.00 4	63.0
17	40.35	30.2	34.31 34.34	47.0	1.48	75.0 36	27.00	60.8
·	25 12	25	26	12	26 I	41	4	2.
No. 6	40.47	27.7	34.43	45.8	1.47 8	70.9	27.04 10	58.4
Nov. 6	40.67	25.6	34.57 20	44.9 5	1.55 18	07.0	27.14	55.4 2
16 26	38	23.8	34.77 26	44.4 3	1.73	63.1 37	27.29 20	
Dez. 6	41.34 45	22.4	35.03	44.1	2.00 36	59.4 36	27.49 25	49.7 3
	41.79		35-33	44.3	2.30	55.0	27.74	
16	42.29	20.9	35.68	44.7	2.81	52.6	28.02	43.8
26	44.05 58	40.9	30.00	45.0	3.34 56	49.7 23	20.34	41.1
36	43.43	21.4	36.45	46.8	3.88	47.4	28.68	38.6
Mittl. Ort	40.40	13.9	33.42	32.8	1.98	89.2	25.91	72.1
sec o, tg ô	1.998	-1.729	1.235	-0.725	2.348	+2.124	1.108	-+0.47

	523) × V	irginis.	524) 4 U	rsae min.	5 25) ι V	irginis.	526) α	Bootis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 ^h 8 ^m	9° 52′	14 ^h 9 ^m	77° 56′	14 ^h 11 ^m	5° 35′	14 ^h 11 ^m	19° 37′
Jan. o	14.43	11.3 20	9.85	60.2	26.31	12.8	41.06	54.0 24
10	14.70	13.3	TO 00	58.3	26.65 34	14.8	41.40	51.6 21
20	15.11	15.2 19	12.00	57.0	20.99	16.8	41.74	49.5
30 Fah.	15.45	17.1	13.13	56.5	27.32	18.7	42.08	47.8
Febr. 9	15.77	18.9	14.24	56.6	27.64	20.4	42.40	46.5
19	16.07	20.5	15.29	57.3 14	27.93	21.9	42.70 28	45.6
März 1	16.34	21.9 12	10.24	58.7	28.20	23.2	42.98	45.2
II	16.58	23.1	17.07	00.0	28.45	24.2 8	43.22	45.2
21	16.79 18	24.1 8	17.74	63.0 28	28.66	25.0	43.43 17	45.6 8
31	16.97	24.9	18.23	65.8	28.83	25.5	43.60	46.4
April 10	17.11	25.4	18.54	68.7	28.98	25.8 I	43.74	47.5
20	17.23	25.7	18.07	771.8 31	29.10	25.9 -	43.85 7	48.8
3°	17.31 6	25.9	18.00	74.9 30	29.18 6	25.8	43.92	50.2 16
Mai 10	17.37	25.9	18.36	77.9 27	29.24	25.6	43.90 ₁	51.8
20	17.40	25.8	17.95	80.6	29.27	25.3	43.97 -	53.3
30	17.41 -	25.6	17.40	83.1	29.28	24.8	43.96	54.9
Juni 9	17.39	25.3	16.72	85.1	29.27	24.4	43.92	56.3
19	17.35 6	24.9	15.93	12 00.7	29.23 6	23.9 6	43.85 8	57.0
29	17.29 8	24.5	15.05	87.9 6	29.17 8	23.3 5	43.77 ₁₀	58.6
Juli 9	17.21	24.1	14.12	88.5	29.09	228	43.67	59.5
19	17.11	23.6	12.15	88.5	28.99	22.3	43.55 13	60.2
29	17.00	23.1 6	1 12 10	88.0	28.88	21.8 5	43.42	60.5
Aug. 8	16.88	22.5	I TT TX '	6 87.1 16	28.76	21.3 5	43.28	$60.6 - \frac{1}{2}$
18	16.76	22.1	10.22	85.5 20	28.64	21.0	43.14	60.4
28	16.65	21.6	0.32	83.5	28.53	20.7	43.01	59.9
Sept. 7	16.54	21.2	8.49	81.1	28.42	20.4	42.88	59.2
17	16.46	21.0	7 70	$78.2 \frac{29}{32}$	28.33 6	20.3	42.78	58.1
27	16.40	20.8	7.14	8 75.0 35	28.27	20.4	42.70	50.8
Okt. 7	16.37	20.8	0.00	71.5 27	28.25	20.7	42.05	55.1
17	16.39	21.0	0.33	67.8 37	28.26	21.2	42.65	53.2
27	16.45	21.4	6.16 -	- 63.0	28.31	21.9	42.69	50.9 26
Nov. 6	16.57	22.I 7	6.18	59.6	28 28.43 16	22.9	42.79 14	48.2
16	10.74	23.1	6.40	55.7 37	28.59	24.1	42.93	45.7 27
26	16.95	24.3	0.00	7 52.0 35	28.79	25.5 16	43.12	43.0 20
Dez. 6	17.20	25.7	7.37	48.5 32	29.04	27.1	43.36	40.I 27
16	17.40	27.3 18	R r r	45.3	20.32	28.0	12.62	27.4
26	17.81	29.1	8.99	42.6	29.63	30.9	43.94 33	34.7 27
36	18.14	31.0	9.99	40.4	29.96 33	32.9	44.27	32.2
Mittl. Ort	15.16	9.2	10.12	82.8	27.01	9.1	41.56	65.7
sec ô, tg ô		-0.174		-1-4.687		0.099	1.062	- + 0.357

	527) λ l	Bootis.	531) 8]	Bootis.	534) p	Bootis.	535) y l	Bootis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 ^h 13 ^m	46° 28′	14 ^h 22 ^m	52° 14′	14 ^h 28 ^m	30° 44'	14 ^h 28 ^m	38° 40'
Jan. o	4.26	56.0	13.67	49.2	1-30 25	55.I ₂₄	33.99 37	61.1
10	4.67	53.6 18	14.11	46.8 24	4.65	52.7	34.36 37	58.0
20	5.09 42	51.8 13	14.56	45.0	5.00 35	50.6	34.73 39	56.5 15
30	5.51 42	50.5 6	15.01 45	43.7 6	5 20	49.0	35.12 37	55.0
Febr. 9	5.91	49.9	15.46	43.1	5.71	47.9 6	35.49	54.0
19	6.29	49.9	15.88	43.1	6.04	17.2	35.84	53.6
März 1	6.64 35	50.4	16.27	42.7	6 21 30	47.2	36.16	53.8
11	6 or 31	STE	16.61 34	44.0	6.62	17.6 4	36.46	54.6
21	7.21	52.T	16.90	46.6	6.85	18.6	26.71	55.8 16
31	7.41	55.I 20	17.14	48.7	7.05	49.9	36.92	57.4
April 10	16	23	17	51.2	7.21	10	37.08	59.4
20	7.57 10 7.67	57·4 ₂₅ 59·9 ₂₇	17.31	520 4/	7 2 4 13	51.5 19	27 21 13	61.6
30	7.72 5	626	17.49	567	7.42	53.4 ₂₁ 55.5 ₂₁	37.29	64.0
Mai 10	7.73	65 2 20	17.50	50.5	7.47 5	57.6	37.33	66.5
20	7.70 3	67.8	17.45	62.1	7.48	59.8	37.33	68.9
	ð	23	9	25	2	20	4	23
30	7.62	70.1	17.36	64.6	7.46	61.8	37.29	71.2
Juni 9	7.51	72.2 18	17.22	66.9	7.41	63.7	37.22	73.3
19	7.37 18	74.0	17.05 20	68.8	7.34 10	65.4	37.12	75.1
7 1: 2 9	7.19	75.4 10	16.85	70.3	7.24	66.8	37.00	76.6
Juli 9	7.00	76.4	16.61	71.4 6	7.12	68.0	36.85	77.8
19	6.79	77.0 2	16.26	72.0	6.98 16	68.8	36.68	78.6
29	6.56 23	77.2	16.09 27	72.2	6.82 16	69.3	36.49	79.0
Aug. 8	0.34	76.9 8	15.82 28	71.8 4	6.66	69.3	36.30	79.0
18	6.11 23	76.1	15.54 26	71.0	6.49 17	60.I	36.11 20	78.6
28	5.89	74.9	15.28	69.7	6.32	68.4	35.91	77.8
Sept. 7	5.69	73.2	15.03	68.0	6.17	67.4	35.73	76.5
17	5.51	71.2	T4 8T 22	6c 8 22	6.02	66 T 13	25.57	74.8
27	5.37	68 8 24	14.63	63.3 25	5.92	64.3	35.44	72.8
Okt. 7	5.28 9	66.0	T4.50 13	60.3	5.85	62.3	35.35	70.4
17	5.23 -5	63.0 ³⁰	14.42	57.1 32	5.81 4	59.9	35.30	67.7
·	1	33	2	34	1	20	0	20
Nov. 6	29 5.24 8	59.7	14.40	53.7	5.82 8	57.3 32	35.30 6	64.8
Nov. 6	5.32	55.0 26	14.45	49.7 38	5.90 12	54.1	35.36	01.3
16	5.45	52.2	14 57 20	45.9 27	6.02	51.1	35.48	57.9 3
Dez. 6	5.66 26	40./ 35	14.77 26	42.2 36	0.19 22	40.0	35.65	54.5
Dez. 6	5.92	45.2	15.03	38.0	6.42	44.9	35.89 28	51.2
16	6.24 26	41.9 29	15.26	35.3 21	6.69 31	41.8	36.17	47.9
26	0.00	39.0	15.73	22.2	7.00	38.9 26	36.49	44.9 2
36	6.99	36.4	16.14	29.6	7.33	36.3	36.84 33	42.2
Mittl. Ort	4.64	74.6	14.13	69.0	4.85	70.2	34.52	78.1
sec o, tg o		+1.053		+1.292			_	+0.80

SCHEINBARE STERNÖRTER

2222	537) η (Centauri.	538) α ² Ce	entauri*).	54 2) α .	Apodis.	543) ¢ B	ootis m.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 ^h 29 ^m	41° 46′	14 ^h 33 ^m	60° 28'	14 ^h 36 ^m	78° 40′	14 ^h 36 ^m	14° 5
Jan. o	57.21	28.3	39.31	19.7	54.00	23.6	58.94	52.8
10	57.64 43	29.2	39.90 59	20 T	55.31	23.3 3	59.26 32	50.5
20	58.07 43	20.4	40.49 59	20.9	56.65	225	11	48.4
	58.49	30.4 16	50	1.5	58.01	0 ;	59.59 34	46.6
Febr. 9	- 41	32.0 18	41.07 57	22.2	133	24.3	59.93 32	
Febr. 9	58.90	33.8	41.64	23.9	59.34	25.7	60.25	45.1
19	59.29 36	35.8	42.18	26.0	60.62	27.5	60.56	44.I
März 1	50.05	27.0	42.67 49	28.3	for Xr	20.7	60.85	43.4
II	50.08 33	40.T	43.11	30.0	02.00	32.1	61.11	43.2
21	60.27	12.2	43.50 39	226 4	63.87	35.3	61.34 20	43-4
31	60.52 25	44.4	43.84 34	36.4 28	64.71	38.4	61.54	43.9
110	21	22	28	29	69	33	10	
April 10	60.73 18	46.6	44.12	39.3 29	65.40	41.7	61.70	44.8
20	60.91	48.6	44.33	42.2 28	05.93	45.2	61.83	45.8
30	61.04	50.6	44.48	45.0 27	00.30	40.0	61.94 7	47.1
Mai 10	61.14 6	52.5 16	44.58	47.7 25	66.50	52.0	62.01 4	48.5
20	61.20	54.I	44.61 3	50.2	00.54 -	55-3	02.05	49.9
30	61.22	55.6	44.58	52.5	66.42	68.4	62.06	51.4
Juni 9	61.20	56.9	9	516	66.13	61.2	62.05	52.8
19	ST. TE 5	10	44.49	56.4	65.69	63.8	62.01 4	54.1
29	61.07	57.9	44.35 19	57.8	65.11		61.95	
T 11	60.95	- 5	44.16	58.8		65.9 67.6	61.86 9	55.2
Juli 9	14	59.3	43.92	50.0	64.41	12	01.00	56.2
19	60.81	50 F	43.64 31	59.5 2	63.62 88	68 8	61.76	57.0
29	60.65	59.4	12.22	59.7 2	62.74	60.6	61.64	57.6
Aug. 8	60.47	50.0	43.00	50.5	61.82	69.7	61.51	57.9
18	60.28 18	r & 4	42.67 33	58.8 7	60.90 92	60.3	61.37	58.0
28	60.10	57.4	42.35	57.7	50.00	08.4	61.23	57.9
Sept. 7	17	11	29	15	83	14	13	
-	59.93 14		42.06		59.16	67.0 18	61.10	57.5
17	59.79 11		41.80	54.4 21	58.41 60	65.2	60.99	56.8
01-4	59.68	53.5 16		52.3	57.81	62.9 26	60.90 6	55.8
Okt. 7	59.61	51.9	41.47 5	50.1	57.37 24	00.3	60.84	54.6
17	59.60	50.4	41.42	47.8	57.13	57.5.	60.81	53.1
27	50.64	48.0	41.46	45.4	ETT TO	54.6	60.82	51.3
Nov. 6	50.76	47.5	17 6T 15	43.0 24	57.33	51.4	160.00 7	40.I
16	59.95	46.4	41 84 -3	41.0	בחחח אין	187	61.02	46.8
26	60.10	45.7	42.17 33	30.3	E8 42	16 2 25	61.10	44.4
Dez. 6	60.49 30	45.3	42.58	38.0	59.28	44.1	61.41	41.9
	35	1	47	9	103	17	26	
16	60.84 39	45.2	43.05 53	37.1	60.31	42.4	61.67 29	39.4
26	01.23	45.0	43.58 57	30.7	61.48	41.2 6	61.96	36.8
36	61.64	46.3	44.15	36.7	62.74	40.6	62.27	34-4
Mittl. Ort	58.61	34.5	40.83	37.0	59.89	35.8	59.62	63.4
sec 6, tg 6	1.341	0.894	2.030	-1.766	5.096	-4.997	1.031	+ 0.29
*) Out	des bellen	Stame.	die jährlich	o Dovollov	e ist bereit			

	545) µ \	irginis.	547) 109	Virginis.	548) a	Librae.	549) Gr	. 2164.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 ^h 38 ^m	5° 16′	14 ^h 41 ^m	2° 15′	14 ^h 46 ^m	15° 40′	14 ^h 49 ^m	59° 38′
Jan. o	27.56	54.8	50.16	24.7	2.77	52.9	13.00	29.0 26
10	27.89	56.7	50.49	22.6	3.11 34	54.6	13.47 50	26.4 20
20	20.22	58.6	50.82	20.6	3.45	56.2	13.97 52	24.4
30	20.50	60.4	51.15 32	18.8 16	3.60	57.9	14.49 51	23.0 8
Febr. 9	28.88	62.1	51.47	17.2	4.13	59.6	15.00	22.2
19	29.19 20	63.5	51.77	16.0	4.45 30	61.2	15.50 48	22.1
März 1	29.48 26	64.7	52.06 26	15.0 7	4.75	02.0	15.90	22.0
11	29.74 23	65.7	52.32	14.3	5.02	64.0	10.40	23.8
21	29.97 20	66.4	52.55 20	14.0	5.27	65.1	10.77	25.5 22
31	30.17	66.9	52.75	13.9 -	5.49	66.0	17.08	27.7
April 10	30.34	67.I	52.92	14.1	5.67 16	66.8	17.33	30.3 28
20	30.49	67.1	53.06	14.0	5.83	67.4	17.50	33.1
30	30.60	66.9	53.17	15.2	5.96	07.8	17.60	30.1
Mai 10	30.68	66.6	53.26	16.0 8	6.06	08.1	17.03	39.1
20	30.74	66.2	53.31	16.8	6.13	68.3	17.59	42.0
30	30.77	65.7 5	53.34	17.7	6.17	68.3	17.49 16	44.8 25
Juni 9	30.77	65.2	53.34 2	18.6	6.19 =	68.3	17.33	47.3 22
19	30.75	64.7 6	53.32 5	19.5	6.17	68.2	17.12	49.5 18
29	30.70 6	64.1 6	53.27	20.4	6.13	68.0	16.86	51.3
Juli 9	30.64	63.5	53.20	21.1	6.06	67.8	16.56	52.7
19	30.55	63.0	53.11	21.8	5.07	67.4	16.23	52.7
29	30.44	62.5 4	53.00	22.3	5.86	67.0	15.88 35	$\frac{53.7}{54.0} \frac{3}{1}$
Aug. 8	30.32	62.1	52.87	22.7	5.74	66.6	15.51 37	53.9 6
18	30.19	61.7	52.74	23.0 3	5.61	66.2	15.14 36	53.3 11
28	30.06	61.4	52.62	23.2	5.47	05.7	14.78	52.2
Sept. 7	20.04	61.2	52,40	23.I	5.35	65.2	14.43	50.6
17	29.84	61.1	52.38	22.9	5.23	64.7	14.11 29	48.6
27	29.76	61.2	52.29	22.5 7	5.14 6	64.3	13.82	46.1 29
Okt. 7	29.71	61.5	52.24	21.8	5.08	64.0 3	13.59 17	43.2 32
17	29.69	61.9	52.22 _	21.0	5.06	63.9	13.42	40.0
27	29.72	62.6	52.24 8	19.9	5.09	63.9	12 22	36.5
Nov. 6	20.81	63.6	52.32	18.4 16	5.16	64.1	13.30	22.8 3/
16	29.94 18	64.7	52.44	16.8	5.30 18	64.6 5	13.37	40 6 7"
26	30.12	66.1 16	52.61	15.1 17	5.48	65.3 10	13.52	24.8 38 24.8 38
Dez. 6	30.35	67.7	52.83	13.1	5.71 -3	66.3	13.76	21.0
16	30.62	69.4	53.08 25	11.0	5.98	67.5	14.07	17.5
26	30.01	71.2	53.37	8.0	6.20	68.8	14.46	14.2
36	31.23	73.2	53.69 32	6.8	6.62 33	70.4	14.90	11.4
Mittl. Ort	28.40	50.0	50.95	31.9	3.75	51.1	13.80	49.8
sec 8, tg 8	1.004	-0.091	1.001	+0.039	1.039	-0.281	1.979	1-1.708

11	550) β Ui	rsae min.	551) P. 3	XIV 221.	552) β	Lupi.	555) β I	Bootis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 ^h 50 ^m	74° 30′	14 ^h 52 ^m	14° 47′	14 ^h 52 ^m	42° 46′	14 ^h 58 ^m	40" 43
Jan. o	55.49	17.7	6.04 32	39.1	48.05	58.1 6	39.37 35	41.9 2
10	56.26 77	15.3 18	0.36	36.7	48.47	58.7	39.72	39.2
20	57.10 88	13.5	6.69 33	34.6	48.90 43	59.7	40.09 37	37.0
30	57.98 89	12.3 6	7.02 33	32.7	49.34 42	61.0	40.48 39	35.2
Febr. 9	58.87 87	11.7	7.35 33	31.3	49.76	62.5	40.86 37	34.0
19	59.74 82	11.9 8	7.66	30.2	50.17 38	64.2	41.23	33.4
März 1	60.56	12.7	7.95 27	29.5	50.55 35	66.1	41.58 35	33.4
11	61.31 64	14.1	8.22	29.3 -	50.90 32	68.1	41.89 29	34.0
21	61.95	16.1	8.46	29.5	51.22 28	70.2	42.18	35.1
31	62.48 53	18.5	8.67	30.0	51.50	72.3	42.42	36.7
April 10	62.87 39	21.3 30	8.85	30.9	51.75 21	74.3 20	42.62	38.7
20	63.12	24.3	8.99 12	32.0	51.96	76.3 20	42.78	40.9
30	63.23	27.4 31	9.11 8	33 4 14	52.13	78.3 18	42.90 7	43.4
Mai 10	63.20	30.5 30	9.19 6	34.8	52.26	80.1	42.97	46.0
20	63.03 7	33.5	9.25	36.4	52.35	81.9	43.00	48.6
30	62.73	36.3 26	9.28	37.9 15	52.40	83.4	42.99	ST.T
Juni 9	62.32 41	38.9	0.28	39.4	52.41	84.8	42.94	53.5
19	61.80 60	4 T.O	$9.25 \begin{array}{c} 3 \\ 6 \end{array}$	40.8	52.38	86.0	42.85	55.6
29	61.20 68	42.7	9.19	42.0	52.31 7	87.0	42.74	57.4
Juli 9	60.52	43.9	9.11	43.1	52.21	87.7	42.59	58.9
19	59·79 76	117	0.01	43.0	52.08 16	88.T	42.42	60.0
29	50.02	44.0	8.89	44.6	51.92	88.2	42.23	60.6
Aug. 8	58.24	41.6	8.76	45.0	51.74 20	88.0 2	42.02	60.9
18	57.45 78	43.7	8.62	45.1	51.54	87.5	41.80 22	60.7
28	56.67	42.3	8.47	45.0	51.35	86.8	41.58 22	60.1
Sept. 7	55.94 68	40.5	8.33	44.7	51.16	85.8	41.37	59.0
17	EE 26	28 2 23	8.21	44.0	51.00	84.6	41.18	57.6
27	54.65	25.4	8.10	12.T	50.86	82.T	41.01	55.7
Okt. 7	54.14	32.3	8.03	41.0	50.77	81.6	40.87	52.4
17	53.73	28.9 34	7.99	40.4	50.72	80.1 15	40.78	50.8
	2.5	36	0	18	2	15	5	
Nov. 6	53.45 15	25.3 39	7.99 5	38.6	50.74 9	78.6	40.73	0
Nov. 6	,53.30 2	TH T	8.04	36.6	50.83	77.2	40.75 8	44.8
26	17		8.15 15 8.20	34.2 25	51.00 21	710	40.83	41.1
Dez. 6	53.49 53.81	13.3 38	8.30 21 8.51	31./ 25	51.21 28		40.96	37.7
	47	9.5	24		51.49		41.10	34.2
16	54.28 60	6.0	8.75 28	26.6	51.83 37	74.0	41.41	30.8
26	71	2.9 26	9.03 30	24.I 24	52.20	74.I	41.71	27.6
36	55.59	0.3	9.33	21.7	52.61	74.6	42.04	24.7
Mittl. Ort	56.79	39.9	6.81	50.1	49.60	63.2	40.13	59.4
sec 8, tg 8		+-3.609	i e	-+0.264		-0.925		

	556) y	Scorpii.	557) 4	Bootis.	558) ¢	Lupi.	560)γTriang.austr.	
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 ^h 58 ^m	24° 56′	15 ^h 0 ^m	27° 16′	15, 5,	51° 46′	15 ^h 10 ^m	68° 21
Jan. o	57.29 35	26.5	42.28	56.3 26	59.61	1.6	42.82 73	24.3
10	57.04	27.8	42.00	53.7	60.09	1.8	43.55 75	23.8
20	58.00 26	29.2	42.94	51.4	60.58	2.3	44.30	23.8
30	58.36	30.7	43.28	49.5	01.07	3.3	45.08 77	24.3
Febr. 9	58.72 34	32.2	43.63 33	48.2	61.57	4.6	45.85 75	25.3
19	59.06	33.8	43.96	47.3	62.04	6. I 18	46.60	26.6
März 1	59.38	35.4	44.27	47.0	02.49	7.9 20	47.32 68	28.4
11	59.08 27	30.9	44.56 25	47.1	02.91	9.9	48.00 62	30.6
21	59.95 24	38.3 13	44.81	47.8	1 03.30 25	12.1	48.62	33.0 26
31	60.19	39.6	45.04	48.8	03.05	14.4	49.17	35.6 28
April 10	60.40	40.8	45.23	50.3	63.95 26	16.7	49.65	38.4 29
20	60.58	41.9	45.38	52.0	64.21	19.1	50.00	41.3
30	60.73		45.50	54.0 20	64.42 16	21.4	50.30 24	44.3
Mai 10	60.85 8		45.59 5	56.0 21	64.58	23.7	50.62	47.3
20	60.93	44.4	45.64	58.1	64.70	25.9	50.78	50.2
30	60.99	44.9 5	45.65	60.2	64.77	27.9	50.85	53.0 26
Juni 9	61.02	45.4 3	45.64	62.2	$64.78 \frac{1}{3}$	29.8	50.83	55.6
19	61.01	45.7 2	45.60 8	64.0	04.75 8	31.4	50.73	58.0
T .: 29	60.97 6		45.52 10	65.7	64.67	32.8	50.54 27	60.0
Juli 9	60.91	46.0 -	45.42	67.0	64.55	33.9	50.27	61.6
19	60.82	45.9 2	45.30	68.0	64.38	34.7	50.94 39	62.0
29	60.70	45.7	45.15 16	68.8	64.18	35.1	49.55	63.9
Aug. 8	60.57	45.4 5	44.99	69.2	63.96	35.2	49.11	64.3
18	00.42	44.9 5	44.82	69.2	63.72	34.9	40.00 46	64.3
28	60.27	44.4	44.65	68.9	63.47	34.2	48.20	63.7
Sept. 7	60.13	43.7 7	44.49 16	68.2	63.23	33.2	17.75	62.7
17	60.01	430 7	44.33	67.2	63.01 ,8	31.9 16	47.34	61.2 15
27	59.90	42.3 8	44.20	65.8 17	62.83	30.3	46.99 35	59.4 22
Okt. 7	59.83	41.5 6	44.10	64.1	62.70 8	28.6	46.71	57.2
17	59.79	40.9	44.03	62.0	62.62	26.7	46.54	54.8 26
27	59.80	40.4	44.01	59.7 26	62.61	24.8	$46.47 \frac{7}{6}$	522
Nov. 6	50.87	40.0 2	44.04	57.1	62.68 7	22.0	46.53	49.6
16	960.01	39.8	44.13	54.0	62.84	21.0	46.74	46.9
2 6	60.19	39.9	44.27	51.0	63.07 30	19.5	47.06	44.6
Dez. 6	60.42 28	40.3	44.46	40.0	03.37	18.4	47.49	42.6
16	60.70	40.0	44.70 28	45.0	63.74	17.5	48.03 62	40.9
26	61.01	41.8	44.08	42.0	64.16	17.0	18 6c	20.7
36	61.35	42.9	45.29	39.3	64.62 46	17.0	49.35	39.0
Mittl. Ort	58.46	26.7	43.05	70.7	61.58	7.8	46.26	32.8
sec 8, tg 8		-0.465		- 1 -0.516		-1.270	2.713	-2.521

	563) ô	Bootis.	564)	β	Librae.	565) 1 II.	Urs. min.	$566) \varphi^1$	Lupi.
1913	AR.	Dekl.	AR.		Dekl.	AR.	Dekl.	AR.	Dekl.
	15 ^h 11 ⁿ	33° 37′	15 ^h 12	m	9° 3'	15 ^h 13 ^m	67° 39′	15 ^h 16 ^m	35° 56′
Jan. o	58.87	63.8	18.36	22	50.1	36.75	75.8 28	15.37 38	45.3
10	59.20 ³³	61.1	18.68	32	51.8	37.29 60	73.0	15.75 30	46.0
20	59.54 36	58.8	19.01	33	53.5 16	37.89 62	70.8	10.14	46.9
30	59.90 26	56.9 14	19.34	33	55.1 16	38.52 65	69.2	16.53	48.0
Febr. 9	60.26	55.5	19.67	32	56.7	39.17	68.2	16.93	49.4
19	60.61	54.7	19.99	31	58.1	39.81 62	67.9	17.31 37	50.9
März 1	00.94	54.4	20.30	28	59.3 10	40.43	68.3	17.08	52.4
11	61.24 28	54.7 8	20.58	26	60.3	41.00	69.4 16	18.02	54.1
21	61.52 61.76 ²⁴	55.5 13	20.84	23	61.0	41.51 44	71.0	18.33	55.7
31	20	56.8	21.07	20	61.6	41.95	73.2	18.62	57.4
A pril 10	61.96	58.5	21.27	18	61.9	42.29 26	75.7	18.87	59.0
20	62.13 62.26	60.5	21.45	15	62.0	42.55 16	78.6	19.09 19	00.5
30 Mai 10	62.36	62.7	21.60	12	62.0 61.8	42.71 6	81.0	19.28	02.0
20	62.41	65.0 24	21.72	9	61.6	42.77	84.7 32	19.43	63.4
	2	24		7	4	42.74	87.9	19.54 8	64.7
Juni 9	62.43	69.8	21.88	3	61.2	42.62	90.8	19.62	65.9
	62.41 5 62.36 5	72.0 21	21.91	0	60.8	42.41	93.6	19.66	67.0
19 29	62.28	74.1	21.91	2	5	42.12 41.76	96.0	19.67	67.9
Juli 9	62.17	75.9 77.4	21.84	5	59.9 59.4	41.35	99.6	19.63 6	69.2
	14	12		8	4	47	11	19.57	
19 29	62.03 16	78.6	21.76	10	59.0	40.88	100.7	19.46	69.5
Aug. 8	61.69	79.4	21.66	12	58.5 58.1	40.38 39.85	101.4	19.33	69.7
18	61.50	79.9 °	21.54	13	57.7	39.05	101.5	19.18	69.6 69.2
28	61.30	79.6	21.27	14	57.4	38.77 54	100.1	18.84	68.7
Sept. 7	61.11	7		14	3	. 52	14	18	
17	60.01	78.9 12	21.13	12	57.1 56.9	38.25	98.7	18.66	68.0
27	60.78	77.7	20.90	11	56.8	37.76 45 37.31 45	04.4 24	18.50 18.37	67.0 66.0
Okt. 7	60.65	74.3	20.82	8	56.8	36.01	91.6	18.26	64.0
17	60.56	72.0	20.78	4	57.0	36.60 31	88.4 32	18.21	63.7
27	60.52	69.4	20.77	1	4	36.37		18.20	62.6
Nov. 6	60.53	66.6	20.82	5	57.4 6 58.0	26.22	8T 2 3/	1905 5	61.5
16	1260.60	63.2 34	1320.93	11	58.9	36.21	77.0 42	18.37 18	60.6
26	60.72 18	60.0	21.08			36.30		TXCC	60.0
Dez. 6	60.90	56.7 33	21.27	19	61.1	36.51	69.3	18.79	59.6
16	61.13	53.5	21.51	24	62.5	36.82	65.6	19.08	1
26	61.40	50.4	21.78	27	64 T	37.24	62.2 33	TO 4T 33	59.5
36	61.71	47.5	22.10	32	65.7	37.74	59.3	19.41 36	60.2
Mittl. Ort	59.72	79.8	19.40		45.3	38.11	96.9	16.84	47.4
sec δ, tg δ	1.200	+ 0.665	1.01	2	-0.160		-1 2.435	1.235	-0.725

	569) y Ur	sae min.	568) p. 1	Bootis.	571) t D	racon.	572) β Co	ron. bor.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	15 ^h 20 ^m	72° 8′	15" 21"	37° 40′	15 ^h 22 ^m	59° 15′	15 ^h 24 ^m	29° 23′
Jan. o	49.67 62	15.6 28	11.29	37.6 28	58.35 42	53.8 29	13.59 31	63.I ₂₇
10	50.29 70	12.8	11.61	34.8	58.77	50.9 21	13.90	60.4
20	50.99	10.6	11.96 37	32.4	59.24 49	48.5	14.23	58.0
30	51.74 77	9.0	12.33	30.4	59.73	46.7	14.50 34	56.0
Febr. 9	52.51 76	8.0	12.70	29.0	60.24	45.5	14.92	54.6
19	53.27 76	7.7 5	13.06	28.2	60.74 48	45.0	15.26	53.6
März 1	54.03	8.2	13.40 34	28.0 -	61.22	45.I	15.59	$53.1 - \frac{5}{2}$
11	54.73 62	9.2	13.72	28.3	61.68	46.0	15.89 28	53.3 6
21	55.35	10.8	14.01	29.2	62.09	47.4 19	16.17	53.9 10
31	55.00	13.0	14.27	30.5	62.44	49.3	16.41	54.9
April 10	56.31	15.6 28	14.49	32.3	62.73	51.7 27	16.63	564
20	56.62 31	18.4	14.67	34.5	62.96 23	5.1.1	т6.8т	58.2
30	56.81 19	21.5	14.81	26.8	63.12	57·4 30	16.95	60.3
Mai 10	56.88	24.7	14.91 6	39·3 ₂₆	63.21	60.4 31	17.06	62.5
20	56.83	27.8 31	14.97	41.9	63.23	63.5	17.13	64.8
30	56.67	30.8 30	14.99	44.5	63.19	66 1	17.17	67.0
Juni 9	56.39	33.6	14.08	46.0	63.08	60.2	17.17	60.2
19	56.02 37	26.1 T	14.92	40.I	62.01	71.8	1774 3	712
29	55.56	28 2	14.83	51.0	62.60	73.0	17.08	73.1
Juli 9	55.02 54	39.8	14.71	52.7	62.42	75.7	16.98	74.6
	60	41.0	15	13	62.11	14	16.86	13
19 29	54.42 53.78 68	./.	14.56 14.38	54.0	61.77	77.I 8	14	75.9 76.8
Aug. 8	00	41.7	14.18	55.0	61.40 37	77.9	16.72	. (
18	53.10 52.40 70	41.5	13.98 20	55.5	61.02 38	78 T	16 27	חחח ח
28	51.70	40.6	13.76	55.6 55.3	60.64	77.5	16.19	
α .	68	14	21	8	38	12	18	
Sept. 7	51.02 65	39.2	13.55 20		60.26	76.3 16	16.01	77.0
17	50.37 59	37.3 24	13.35 18	53.4 16	59.90	74.7	15.83	76.0
Okt. 7	49.70	34.9	13.17	51.8 20	59.57	72.5	15.68	74.7
	49.20	34.2 32	13.02	49.8 24	59.29	70.0		73.1 2
17	48.83	29.0	12.91		59.06	67.1	15.46	71.0
27	48.50	25.6	12.85	44.8	58.89	63.8	15.41	68.7
Nov. 6	48.29	22.0	12.83	41.9	58.80	00.3	15.41	66.1
16	40.20	17.8	12.00	30.4	58.80	56.2 38	15.40	1 63.0
26 T) - 6	48.26	13.9 38	12.99	35.0	58.88	52.4	3 15.57 ₁	59.9
Dez. 6	48.46	10.1	13.16	31.0	59.05	40.0	15.74	56.8
16	48.79	6.4	13.38	28.2	59.30	4.1.0	15.06	52.7
26	49.25	3.0	T2.65	25.1 34	50.62	41.5	16.21	50.7
36	49.80 55	0.0	13.95	22.I	60.01	38.4	16.51	47.9
Mittl. Ort	51.43	36.8	12.21	54.3	59.55	73.9	14.51	78.1
Mileti. OIL	7-1-5	50	~ = . = .	74.7	נכיענ ו	13.7	-4.0 ×	10.1

	573) v	Bootis.	575) r	Lupi.	577) y 1	librae.	578) α Co	ron, hor.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	15 ^h 27 ^m	41 7'	15 ^h 29 ⁿ	40" 52'	15 ^h 30 ^m	14° 30′	15 ^h 30 ^m	26° 59'
Jan. o	47.25 3	27.5 29	18.58	28.0	38.26	4.2	59.28	70.3
10	47.58	2.16	18.97	28.3 6	30.50	5.6	59.58	67.6
20	47.94 3	22.2	19.38	28.9	38.91 33	7.1	59.91 33	65.3
30	48.31	20.2	19.80	29.8	39.25	8.5	60.24 33	63.3
Febr. 9	48.69	18.7	20.22	31.0	39.50	10.0	00.50	61.7
19	40.07	17.0	20.62	32.3	39.91	11.3	60.92	60.7
März 1	49.42	17.7	21.02	33.8 15	40.23	12.6 13	61.24 32	60.1
11	$49.76 \frac{3}{3}$	18.1	21.39 37	35.4 16	40.53 30	13.6	61.54 28	60.I
21	50.07 3	10.0	21.73 34	37.0	40.80	14.5	61.82	60.6
31	50.34	20.5	22.05	38.7	41.05	15.2	62.06 24	61.6
April 10	50.57	2.2. 4	22.33	40.4	41.27	15.7	62.28	63.0
20	50.76	24.6	22.58	42.2	41,47	16.0	62.47	64.7
30	50.0T	27.T	22.80	12.0	41.64	16.3	62.62	66.6
Mai 10	ET 02	20.7	22.97	45.5	41.70	16.4	62.73	68.7
20	51.08	32.4	23.11	47.0	41.90	16.4	62.82	70.9
20	51.11	25 0	23.21 6	48.5	41.99	16.3	62.87	72 T
Juni 9	FT.00	35.0 26	23.27	49.8	42.04	16.1	62.88	73.1
19	51.03	39.9	23.28 I	51.0 12	42.06 -	15.9	62.86	75.3 20
29	50.02	12.0	22.25	52.0	42.05	15.7	62.81	79.I
Juli 9	50.79	43.7	23.19	52.8	42.01	15.5	62.72	80.6
	10	14	11	- 6	7	3	11	12
19	50.63	45.1	23.08	53.4	41.94 10	15.2	62.61	81.9
Aug 29	50.44 2	46.1 6	22.94 16	53.7	41.84	14.9	62.47	82.9
Λug. 8	50.23	46.7	22.78 22.60	53.8	41.72	14.5	62.32 18 62.14 0	83.5
18 28	50.00 2	46.5	22.40	53.6	41.59	14.1	61.96	83.8
	49.77	3 7	20.40	53.1	41.44	13.0	18	83.7
Sept. 7	49.54	45.8	22.20	52.4	41.30	13.4	61.78	83.3
17	49.32	44.6	22.02 16	51.5	41.16	13.1	61.61	82.5
014 27	49.13	42.9 20	21.86	50.4	41.04 9	12.8	61.46	81.3
Okt. 7	48.96	40.9	21.74 8	49.1	40.95 6	12.6	61.33	79.8
17	48.83	38.5	21.66	47.8	40.89	12.5	61.24	77.9
27	48.75	35.8 31	21.64	46.4	40.88	12.6	61.19	75.7
Nov. 6	48.72	32.7	21.67 3	45.1	40.91 8	12.8	61.18	73.2
16	48.75	29.4 37	21.77 19	43.9	40.99	13.2	61.22	70.5
26	"48.85 ₁₁	25.7	21.96	42.9	41.14	13.9 8	61.33	07.3
Dez. 6	49.01	22.2	22.19	42.I	41.33	14.7	61.49	64.3
16	49.22	18.7	22.48	41.7	41.56	15.8	61 70	61.3
26	40.48	15.5	22 82 34	47 6	41.83	17.0	61.96 28	582 3
36	49.79	12.4	23.20 38	41.6	42.13	18.3	62.24 28	55.5
Mittl. Ort	48.24	44.8	20.24	30.3	39.42	0.2	60.24	84.7
see 8, tg 8	1.328	+0.873	1.322	-0.866	1.033	- 0.259	1.122	-1 0.510

444	582) a Se	erpentis.	583) β Se	rpentis.	584) z Se	rpentis.	585) µ Se	rpentis.
1913	AR.	Dekl.	AR.	Deld.	AR.	Dekl.	AR.	Dekl.
116	15 ^b 39 ^m	6° 41′	15 ¹ 42 ^m	15" 41'	15 ^h 44 ^m	18° 24'	15 ^h 45 ^m	3" 9'
Jan. o	57.86	45.5 22	9.28	24.4 25	48.36	21.9 25	3.57 20	60.3 18
10	58.14	43.3 20	9.57	21.9 22	48.65 30	19.4 23	3.87 30	62.1 18
20	58.46	41.3 18	9.88 33	19.7	48.95	17.1 20	4.18 32	63.9 16
30	58.78 32	39.5 16	10.21 33	17.7	49.28	15.1 16	4.50 22	65.5 15
Febr. 9	59.10	37.9	10.53	16.2	49.60 32	13.5	4.82 32	67.0
19	59.41 31	36.7	10.85	15.0 8	49.92 31	12.3	5.14 31	68.3
März 1	59.72 29	35.8	11.16	14.2	50.23	11.6	5.45 29	69.3
11	60.01	35.4	11.45	13.9	50.53	11.3	5.74 27	70.1
21	60.27	35.1	11.72	14.0	50.80	11.5 6	6.01	70.5
31	60.52	35.3	11.97	14.5	51.05	12.1	6.26	70.7
April 10	60.73	35.8	12.10	15.4	51.27 20	13.1	6.49 20	70.6
20	60.93	36.6	12.38 16	16.6	51.47 16	14.4 16	6.60	70.4
30	61.09	37.5 12	12.54	18.0 14	51.63	16.0	6.86	69.9 6
Mai 10	61.23	38.7	12.68	10.6	51.77	17.8	7.01 15	60.3
20	61.33	39.9	12.78	21.3	51.87	19.6	7.13	68.6
30	61.41	41.2	12.85	23.1	51.94	21.5	7.22	67.9
Juni 9	61.46	12.5	12.80	24.8	51.08	22 2	7.28 6	67.1
19	$61.47 \frac{1}{}$	127	12.90	26.5	51.98	25.T	7.31 3	66 2
29	61.46	44.0	12.87	28.0	*TO6 1	26.7	7.30	65.5
Juli 9	61.42	46.0	12.82	29.4	51.90	28.2	7.27 3	64.8
19	61.34	46.9	12.73	30.5	51.81	29.4	7.20	64.1
29	61.24	477	12.62	31.4	51.70	30.4	7.11 9	63.5
Aug. 8	61.12	48.3	12.40	32.1	51.56	31.1	7.00	63.0
18	60.00	48.7	T2 24 13	32.5	5T.4T	31.5	6.87	62.6
28	60.84	48.9	12.18	32.7	51.24	31.7	6.72 15	62.3
Sept. 7	60.69	48.9	12.02	2	51.08	2	15	62.2
Sept. 7	60.55	48.7	11.86	32.5 32.1 4	- 10	31.5	6.57	62.1
27	60.42	48.3 4	11.72	31.3	50.92 15	30.1	6.43	62.2
Okt. 7	60 2T 11	47.6	11.61	30.3	50.65	29.0	621	62.5
17	60.23	46.6	11.52 9	29.0	50.55	27.6	6.13	63.0
,	3	12	5	17	5	18	3	
27	60.20	45.4	11.47	27.3 18	50.50 I	25.8	1	63.6
Nov. 6	60.21	44.0 16	11.47 5	25.5 22	50.49	23.8	6.11 6	64.5
16	60.26		20 11.52 11	23.3 26	50.53 11	21.5	6.17	65.5
Dez. 6	60.38	40.4 21	11.63	20.7	50.64 15	18.8	0.29	66.9 68.4
Dex. 0	60.54		11.78	18.2	50.79	16.2	6.46	
16	60.75 25	36.2	11.98	15.7	50.08	13.5	6.66	70.0
26	61.00	34.0	12.22	13.1	51.22	10.8	6.91 28	71.7
36	61.27	31.8	12.49	10.6	51.49	8.3	7.19	73.5
Mittl. Ort	58.89	55.2	10.31	36.2	49.39	34-4	4.69	53.0
sec 8, tg 8	1.007	-1 0.117	1.039	-+0.281	1.054	+0.332	1.002	-0.05

	588) a Se	erpentis.	590) 🕻 Uı	rsae min.	589) β Tri	ang. aust.	593) ε ('o	ron. bor.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
-, -, -	15 ^h 46 ^m	4° 43′	15 ^h 47 ^m	78° 3'	15 ^h 47 ^m	63° 9′	15 ^h 53 ^m	27° 7'
Jan. o	27.60	70.7	5.11	24.9	24.96 58	42.4 8	58.01 ₂₈	30.7 28
10	27.89 31	68.6	5.86 75	21.9 30	25.54 6	11.6	58.29	27.9 25
20	28.20	66.6	6.76	19.5	26.15 65	$41.3 - \frac{3}{1}$	58.00	25.4 21
30	28.52	64.8	7.77	17.7	26.80 65	41.4 5	58.93	23.3 16
Febr. 9	28.84	63.3	8.84	16.5	27.45	41.9	59.27	21.7
19	20.15	62.0	0.04	T. C	28 10	42.8	59.60	20.5
März 1	20.46 31	61.1 6	11.03	16.1 8	28 72 03	110	50.02	то.8
11	29.75	60.5	12.06	16.a	20.22	45.6 18	60.23	19.8
21	30.02	60.3	13.01 95	18.3	20.00	47.4	60.52	20.2
31	30.27	60.4	13.85	20.2	30.42	49.6	60.79	21.0
April 10	30.49	60.9	14.53	22.7	30.90	52.0	61.02	22.3
20	30.60	61.5	15.06 53	25.4	21.21	54.4	61.23	24.0
30	30.86	62.4	15.41 35	28 5 31	31.67	56.9	61.40	25.0
Mai 10	31.00	63.5	15.58	31.6 31	31.06	506 2/	67 54 14	28.T
20	31.12	64.6	15.57	34.8 32	32.19	62.2	61.65	30.4
	9	12	20	31	15	25	7	22
T: 30	31.21	65.8	15.37 36	37.9 29	32.34 8	64.7	61.72	32.6
Juni 9	31.26	67.0 68.2	15.01	40.8 26	32.42	67.2	61.75	34.9 21
19	31.28	12	14.48 68	43.4	32.42	69.5 20	61.75	37.0
Juli 9	31.27	69.4 10	.01	45.6 47.6	32.35	71.5	61.72 8 61.64	39.0
Juli 9	31.23	70.4	12.99	4/.0	32.21	73.3	10	40.7
19	31.16	71.3 7	12.08	49.1	32.00	74.8	61.54	42.1
29	31.07	72.0	11.09 106	50.1	31.73	76.0	61.41	43.3 8
Aug. 8	30.95	72.6	10.03	1	31.42	70.7	61.26	44.1
18	30.81	73.0	8.94	50.5 6	31.07 38	76.9	61.08	44.6
28	30.67	73.3	7.83	49.9	30.69	76.8	60.90	44.7
Sept. 7	30.52	73.4	6.73	48.9 16	30.33	76.2	60.71	44.5
17	30.37	73.2	5.66	47.3	29.98 35	75.2	60.53	43.9
27	30.24	72.8 6	4.66	45.3 25	29.66	73.8 14	60.36	42.9
Okt. 7	30.13	72.2	3.76 80	42.8 29	29.39 20	72.0 21	60.21	41.5
17	30.06	71.4	2.96	39.9	29.19	69.9	60.09	39.7
27	30.02	70.4	2.31	36.7	29.08	67.7	60.02	37.6
Nov. 6	30.02	60.T	1.82 49	33.2 35	20.06 =	65.4 23	50.00 -3	25 2
16	30.07	67.5	1.51	29.5	20.14	63.I T	60.01	32.6
26	20 10	65.6	1.20	25.3	20.35	60.6	2360.00	20.5
Dez. 6	30.35	63.7	1.50	21.6 37	29.66	58.6	60.22	26.5
	20	20	1.80	37	40	18	18	30
16 2 6	30.55	61.7	2 20 50	17.9 35	30.06	56.8	60.40	23.5
36	30.79 31.06 ²⁷	59.6	2.30 68 2.98	14.4 31	30.54 55	55.5 10	60.63 ²³ 60.90	20.5 28
30	31.00	57.5	4.90	11.3	31.09	54.5	00.90	17.7
Mittl. Ort	28.68	80.0	8.39	45.4	27.98	47.3	59.09	45.0
see 8. tg 8	1.003	-+0.083	4.835	+ 4.730	2.216	- 1.977	1.123	+0.512

	594) გ.	Scorpii.	598) 🖁 D	raconis.	597) β	Scorpii.	603) 8 ()	phiuchi.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	15 ^h 55 ^m	22° 22'	16 ^h 0 ^m	58° 47′	16 ^h 0 ^m	19° 34′	16 ^h 9 ^m	3° 28'
Jan. o	9.82	33.1	13.83 36	31.5	21.19 31	9.4	45.88	23.9 17
10	10.14 33	34.0	14.19	28.4 27	21.50	10.4	46.16	25.6
20	10.47	35.1	14.61 46	25.7	21.83 33	11.5	10 10	27.3 16
30	10.82 35	36.2 12	15.07 48	23.5	22.17 34	12.7	46.77 31	28.0
Febr. 9	11.17 35	37.4	15.55	21.8	22.51 34	13.9	47.09	30.3
19	11.51	38.6	16.04	20.9	22.85	15.0	47.41 av	31.5
März 1	11.85 34	39.7	16.52 49	20.7	23.18 33	16.1	47.72 31	32.5
11	12.17	40.8	16.99	21.1	22.50 3*	17.1	18 02 30	33.2
21	T2.47 30	41.7	17.43	22.I	2280	18.0	48.30	33.6
31	12.75	42.6	17.82 39	23.7	24.08 ²⁸	18.7	48.57	33.7 -
•	26	7	34	22	25	6	25	1
April 10	13.01	43.3	18.16	25.9 25	24.33	19.3	48.82	33.6
20	13.24 20	44.0 5	18.44	28.4	24.56	19.8	49.04 19	33.3
30	13.44	44.5	18.66	31.3	24.77 18	20.2	49.23	32.0
Mai 10	13.62	45.0	18.81	34.3	24.95	20.5	49.40	32.2 8
20	13.77	45.4	18.90	37.5	25.09	20.7	49.54	31.4
30	13.88	45.7	18.92 -	40.6	25.21	20.9	49.66	30.6
Juni 9	13.96	46.0	18.87 5	43.6 30	25.29	20.0	49.74	20.77
19	T4.00	46.2	18 76	46.5	2: 04	21.0	40.70	280
29	14.01	46.4	18.58	40.0	25 26	21.0	$49.79 \frac{1}{2}$	28 T
Juli 9	13.99	46.4	18.35	51.2	25.34	21.0	49.78	27.3
	6	0	18.07	18	0	100	5	26.6
19	13.93 9	46.4	34	53.0	25.28	20.9	49.73 8	26.0
Aug. 8	- 12	46.4	17.75 35	54.4 9	25.19 11	20.8 20.6	49.65	5
18	13.72		17.40 38	55.3 4	25.08	2	49.55	25.5 4
28	13.58	46.0	17.02	55.7 I	24.95	20.4	49.42	25.1
	13.43	45.7	40	55.6	24.80	20.1	49.27	24.9
Sept. 7	13.27	45.3	16.22	54.9 11	24.64	19.7	49.12	24.7
17	13.12	44.9	15.83 37	53.8	24.49	19.4	48.97	24.6
27	12.98	44.4	15.46 33	52.1	24.35	19.0	48.83	24.6
Okt. 7	12.87	44.0	15.13 28	50.0 25	24.24	18.0	48.71	24.9
17	12.79	43.5	14.85	47.5	24.15	18.3	48.02	25.3
27	12.75	43.2	14.62	44.5	24.11	18.1	48.57	25.0
Nov. 6	12.76	42.9 3	14.46	41.3	24.12	$17.9 \frac{2}{1}$	48.56	26.7
16	12.82	42.8	14.37	37.8 35	24.17	18.0	48.59	27.6
26	12.05	42.8	11.38	22.7	24.20	18.2	48.68	28.8
Dez. 6	13.12	43.1	14.47	29.9	24.46 17	18.6	48.83	30.3
	22	4	18	37	20	6	18	15
16	13.34 27	43.5 7	14.65 26	26.2 36	24.66	19.2	49.01	31.8 16
26	13.61	44.2	14.91	22.0	24.92 29	20.0	49.24 26	33.4 17
36	13.91	45.0	15.24	19.3	25.21	20.9	49.50	35.1
Mittl. Ort	11.18	29.9	15.43	50.4	22.53	5.3	47.09	16.0
sec ò, tg ò		-0.412		1.650		0.355	/	0.061

2020	606) 19 U	rsae min.	604) $\gamma^2 N$	lormae.	605) a O ₁	phiu c hi.	608) т Н	erculis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	16 ^h 13 ^m	76° 5′	16 ^h 13 ^m	49° 56′	16 ^h 13 ^m	4° 28′	16 ^h 17 ^m	46° 30
Jan. o	13.83	30.0	17.25	33.8	41.75 27	60.3	6.08	55.3 3
10	14.42	26.8 32	17.66	33.3 5	42.02	62.0 16	6.37 34	52.1 2
20	15.14 82	24.I 22	18.10 44	33.1	42.32	63.6	6.71 36	49.3 2
30	15.96	21.9	18.57	33.2	42.64 32	65.1	7.07 38	46.9
Febr. 9	16.86	20.4	19.04 48	33.0	42.90	66.5	7.45	45.1
19	17.80 96	TQ.5	10.52	34.3	43.28	67.6	7.84	43.9
März 1	I τΧ 76 ′	19.2	10.00	35.3 12	43.50	68.6	8.23 39	43-3
11	19.68 92	10.7	20.44	36.5	42.80	69.3	8.61 36	43-3
21	20.56 78	20.7	20.88	37.8 13	44.18 29	69.7 4	8.07	44.0
31	21.34	22.4	21.28	39.3	44.44	69.9	9.30 33	45.2
April 10	22.01	24.6	21.66	40.9	44.69	69.8	9.60	47.0
20	22.56 55	27.2	22.00 34	12 7	14.02	69.5	0.85 25	10.2
30	22.07	30.2	22.21 31	14.5	45.12	60 T	10.07	ET.8
Mai 10	23.22	22.2 3*	22.57	46.2	45.20	68.5	10.22	54.6
20	23.31	36.5	22.79	48.2	45.44	67.8	10.35	57-5
40	6	32	17	18	12	8	7	2
Juni 9	23.25	39.7	22.96	50.0 18	45.56	67.0 8	10.42	60.4
	23.04 36	42.8 29	23.08 6	51.8	45.65	66.2	10.45 3	63.4
19 29	49	45.7 26	23.14	53.5 16	45.70	65.4 8	10.42 8	68.7
Juli 9	22.19 61 21.58	48.3	23.15	56.5	45.72	64.6 8	10.34	71.0
	73	50.5	23.11	50.5	45.70	6	16	1
19	20.85 81	52.4	23.02	57.7	45.65 8	63.2	10.06	72.9
29	20.04 88	53.7	22.88	58.0	45.57 ₁₀	62.6	9.86	74.5
Aug. 8	10.10	54.6	22.69	59.2	45.47	02.1	9.63 26	75.6
18	18.23 96	55.0	22.48	59.5	45.34	61.7	9.37 27	76.3
28	17.27	54.9	22.24	59.5	45.20	61.4	9.10	76.5
Sept. 7	16.31	54.3 12	21.99	59.1 6	45.04	61.2	8.82	76.2
17	15.36 95	53.1 17	21.75	58.5 10	44.89	61.1	8.54 27	75.5
27	14.44 84	51.4 21	21.52 19	57.5	44.75	61.1	8.27	74.2
Okt. 7	13.60	49.3	21.33	562	44.64	61.3	8.c2 25	72.6
17	12.84	46.8	21.17	54.8	44.54	61.7	7.82	70.4
27	12.20	43.8 30	21.08	52.7	14.40	62.2	7.65	67.0
Nov. 6	1 60 54	1063	21.05	51.4	44.47	62.9	7.54	65.0
16	11.32 30	37.0	21.10	40.7	1451 4	62.8	7.49	61.9
26	11112	33.3	21 22	48.1	44.50	64.0	7.50	58.4
Dez. 6	- M. A.		2721.43	46.5	44.74	66.4		54.5
	17	37	27	13	10	14	7.58	
16		25.5 36	21.70	45.2 10	44.92	67.8	7.73 21	51.0
26	11.03	21.9	22.04 3	44.2	45.14 26	09.3 16	7.94 25	47.5
36	12.16	18.6 33	22.42	43.5	45.40	70.9	8.21	44.2
Mittl, Ort	17.32	49.3	19.42	34.8	42.98	52.5	7.50	72.2
sec 8, tg 8		-1-4.040		-1.190				+1.0

	609) y l	ferculis.	611) γ	Apodis.	615) n D	raconis.	616) α	Scorpii.
1913	ΛR.	Dekl. -I-	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	16 ^µ 18 ^m	19° 21′	16 ^h 19 ^m	' 78° 42'	16 ^h 22 ^m	61° 42′	16 ^h 24 ^m	26° 14'
Jan. o	3.69	11.7 26	57.01	9.3 18	46.61	21.2	2.71	27.I 6
CI.	3.96	9.1	58.11	7.5	46.95 42	17.9 33	3.02 31	27.7
20	4.25 30	6.8 21	59.34	6.2	47.37 46	15.0	3.35 34	28.4 8
30	4.55 22	4.7 17	60.65	E 4	47.83	12.6	3.69 36	29.2
Febr. 9	4.87	3.0	62.03	5.1	48.33	10.8	4.05	30.0
19	5.10	1.7	62 11	5.2	18.85	9.6	4.40	31.0
März 1	5.50	0.8	64.84	5.8	10 27 52	0.1	4.75 35	31.9 8
11	5.81 31	0.5 -	66.21	6.0	10.88 51	9.3 8	5.00	32.7
21	6.10 29	0.6	67.53	8.4	50.37	10.1	5.42 33	33.6 8
31	6.37	1.2	68.76	10.3	50.81	11.6	5.73 28	34.4
April 10	6.62	2.2	69.90	12.5	51.21	13.5	6 or	35.1 7
20	6.84	2 5 13	70.01	15.0 25	ET 54 33	160	6.28	258
30	7.04	5.T	71.80	9 177 2/	51.82	188 28	6.52	36.4
Mai 10	7.20	7.0	72.53	3 20.5	52.OT 19	2.T. 8 3°	672	26.0
20	7.34	9.0	73.10	7 23.5 30	52.14	25.0 32	6.91	37.4
•	10	20	3	9 31	5	28.3	15	5
Juni 9	7.44	11.0	73.49	26.6 30	52.19		7.06	37.9
	7.51	13.0	73.71	29.6 29	52.16	31.4 30	7.17	38.3 38.7
19	7.54	15.0 18	13.14	5 34.5 28	52.07	34.4 28	7.24 4	- 4
29 Juli 9	7.54	18.4	73.59	35.3 25	51.90 51.66 ²⁴	37.2 39.6 ²⁴	7.28	39.1
յաս 9	7.50 8	15.4	73.26 3	9 37.8	29	20	5	39.4
19	7.42	19.9	72.77 6	40.1 18	51.37	41.6	7.23	39.6
29	7.32	21.1	12.13	41.U	51.03	43.3	7.16	39.7
Aug. 8	7.19	22.0	777 20	43.3 10	50.64	44.4 7	7.04	39.7
18	7.04	22.7	70.49	44.3	50.22	45.1	- 6.91	39.7
28	6.87	23.0	69.57	14.7	49.78	45.3	6.75	39-5
Sept. 7	6.70	23.I	68.6T	11.5	40.32	44.9	6.58 16	39.2
17	6.52 16	22.8	67.67 8	12.0	48.87 45	44.0	6.42	38.8
27	6.36	22.1 7	66.79	12.6	48.44 43	42.7	6.26	38.4
Okt. 7	6.21 15	21.1	66.00 6	40.9	48.04 36	40.8	6.12	37.9 5
17	6.09	19.8	65.35	28.8	47.08	38.5	6.02	37.4
27	6.00	18.2	6187	26.4	47.39	35.7	5.95	26.8
Nov. 6	5.06	16 2 19		33.6	47 16	32.6	5.03	26.2
16	5.97	14.I 24	64.53	20.7	47.01 13	20 2 34	5.96	36.0
26	6.02	TT 77 ~4		- 2'/.U	46.05	25.6	6.05	25.7
Dez. 6	286.14	8.9	2065.16	24.8 31	46.99	21.5	6.21	35.6
16	1/	20	6-80	4 27	14	38	20	1
26	6.31	6.3	66.63	3 22.1 23 TO 8 23	47.13	17.7 36	6.41	35.7 36.0
36	6.51 25	3.6 ₂₆	67.65	19.8 ² 17.8	47.35 31 47.66	14.1 10.7 34	6.94	36.4
30	0.70	1.0	07.05	17.0	47.00	10./	0.94	30.4
Mittl. Ort	4.88	24.3	64.26	12.9	48.59	39.4	4.22	23.3
seco. tgo	1.060	+0.351	5.107	5.008	2.110	+1.858	1.115	-0.493

	618) β H	erculis.	619) A D	raconis.	621) σ !!	erculis.	622) \$ Op	hiuchi.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	16 ^h 26 ^m	21° 40′	16 ^h 28 ^m	68° 56′	16 ^h 31 ^m	42° 36′	16 ^h 32 ^m	10° 23′
Jan. o	27.53	29.6	6.21	64.7	16.43	41.4 32	20.67	37.3
10	27.78	26.9 24	6.61 49	01.4	16.70 31	38.2 28	20.94 29	38.5
20	28.07	24.5	7.10	58.5	17.01 34	35.4 25	21.23	39.9
30	28.37	22.3	7.07 62	56.1 18	17.35 36	32.9	21.54	41.1
Febr. 9	28.69 32	20.6	8.29 65	54.3	17.71	31.0	21.86	42.3
19	20.01	19.3	8.94 66	53.I	18.08	29.6	22.18	43.4
März 1	29.33 32	18.4	9.60 65	52.6	$18.45 \frac{37}{36}$	28.8	22.50 32	44.3
11	29.64 29	$18.1 - \frac{3}{1}$	10.25 62	52.8	18.81	28.7	22.82 32	45.0
21	29.93 28	18.2	10.87 57	53.6	19.15 34	29.2 5	23.11 29	45.5 3
31	30.21	18.8	11.44	55.I	19.48 33	30.3	23.40	45.0
April 10	30.47	19.8	11.94	57.I 25	19.77	21.0	23.66	45.8
20	30.60	21.2	12.37 43	506 "	20.03	22.0	22 01 25	45.8
30	30.90	23.0	12.71	62.4	20.26 23	36.3	24.13	45.5
Mai 10	31.07	24.9 21	12.05	65.5	20.44	30.0	24.32	45.2
20	31.21	27.0	13.08	68.7	20.58	41.9	24.49	44.7
30	31.32	29.1	13.12	72.0	20.67	44.8	24.63	44.2
Juni 9	31.39	21.2	12.05	75.2 32	20.72 5	47.7	24.74	127
19	31.43	22.4	12.80	78 2	20.72	504	24.81	43.1
29	31.43	25 1	12.63	81.0	20.67	52.0	24.85	12.6
Juli 9	31.39	37.2	12.29 34	83.5 25	20.58	55.4	24.85	42.1
	7	38.7	11.87	21	13	20	3	4
19 29	31.32	40.0	11.38 49	85,6 87.2	20.45	57.4 17	24.82 7 24.75 7	41.7
Aug. 8	31.08	410	10.84	88.4	20.08	59.I 60.4	2465	40.9
18	30.93	41.8	10.25 59	89.1	19.85 23	61.2	24.53	40.6
28	30.76	42.2	061	80.2	19.60 25	61.6	24.39	40.3
	19	0	63	4	26	1	15	
Sept. 7	30.57 18		9.01 63	88.9	19 34 26	61.5	24.24 16	
17	30.39	41.9 6	8.38 60	88.1	19.08	61.0		39.9
Okt. 7	30.22		7.78 56	86.7	18.59	58.6	23.93	39.8
17	29.93	39.0 13	6.71	84.9 82.5	18.39	56.7	23.80	
·	10	17	44	27	10	23	23.70	39.9
27	29.83	37.3 20	6.27	79.8	18.23	54.4 27	23.63	40.1
Nov. 6	29.78	35.3 22	5.93	70.0	18.12	51.7	23.00	40.5
16	1 1 1	33.I 25	5.68 13	73.2 26	18.00	48.8	23.02	41.0
26 Day 6	29.82	30.0	5.55 I	09.0	1 10.00 8	45.5	43.09	41.7
Dez. 6	29.93	27.7	5.54 -	- 05.5	18.14	41.0	43.04	42.7
16	30.08	25.0	5.65	61.7	18.27	38.3	23.99	43.7
26	30.27	22.2	5.80	58.0 37	18.46	34.9	24.21	44.9
36	30.51	19.5	6.23	54.5	18.70	31.6	24.46	46.1
Mittl. Ort	28.76	42.5	8.83	83.0	17.87	57.4	22.00	30.1
sec 8, tg 0	1.076	-1-0.397	2.785	-1-2.599	1.359	+0.920	1.017	-0.18

	625) a Tria	ing. aust.	626) η H	erculis.	627) Gr	- 2377-	628) ε S	corpii.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Deki. +	AR.	Dekl.
	16" 39"	68° 52'	16 ^h 39 ^m	39° 4′	16 ^h 43 ^m	56° 55'	16 ^h 44 ^m	34° 8′
Jan. o	22.45 61	8.7	53.34 26	58.7	36.77 29	56.3	29.79 31	13.7
10	23.06 69	7.0	53.60	55.5 ₂₈	37.06	$52.9 \frac{34}{31}$	30.10	13.7
20	23.75 74	5.7 8	53.89 32	52.7 25	37.41 35	49.8 26	30.43 36	13.8
30	24.49 77	4.0	54.21	50.2 20	37.81	47.2 20	30.79 38	14.2
Febr. 9	25.26 %	4.5	54.56	48.2	38.24 43	45.2	31.17	14.6
19	26.06 80	4.5	54.91	46.8	38.60	43.7	31.54 ₃₈	15.2
März 1	26.86	1.0	55,26 35	15.0	39.16 47	43.0	31.02	15.9
II	2 7.65 $\frac{79}{76}$	5.6	55.62	45.7	30.62	$\frac{42.8}{6}$	32.29 37	16.6
21	28.41	6.8	55.05	160 3	40.06	12.1	32.65	17.4 8
31	29.14 73	8.3	56.27	47.0	40.47	44.6	33.00 35	18.2
April 10	29.82	10.1	56.56	48.5	40.85	46.3	32	19.1
20	30.44	I2.I	56.82	50.4	JT T8 33	48.6	33.32 ₃₀ 33.62 ₂₈	19.1
30	27.00	14.4	57.05	52.7	41.46	51.2	_0	208
Mai 10	31.48	T6 8 24	57.24	552 -3	AT 68 22	54.2	33.90 ₂₄ 34.14 ₂₂	21.6
20	31.87 39	19.4	57.39	58.0	41.84	3.	34.36	22.5
	32	25	10	28	' ' 9	57.3	18	
r · 30	32.19 21	21.9	57.49	60.8	41.93	60.5	34.54	23.3
Juni 9	32.40	24.6	57.50	63.6	41.97	63.7	34.68	24.2
19	32.52	27.1	57.58	66.3 26	41.93	00.8	34.78	25.0
Juli 9	32.53 -8	29.6	57.55 7	68.9 23	41.83 16	69.7 26	34.83	25.8
Juli 9	32.45	31.9	57.48	71.2	41.67	72.3	34.84	26.5
19	32.27	33.9 18	57,37	73.3	41.45 26	74.6	34.81 7	27.1
29	32.00	35.7	57.22 18	75.0 17	41.19	76.5	34.74 12	27.6
Aug. 8	31.64 42	37.0	57.04 21	76.4 9	40.88 31	77.9	34.62	28.0
18	31.22	38.0	56.83	77.3 5	40.53 35	78.9 5	34.48	28.2
28	30.77	30.5	50.00	77.8	40.16 37	79.4	34.31	28.2
Sept. 7	30.28	38.5	56.36	77.9	39.77	79.4	34.12 .8	28.1
17	29.79	38. I	56.11 25	77.5	30	78.0	22.04	27.8
27	20.32 47	37.I	55.87	76.6	20 OT 30	778 11	2275	27.3
Okt. 7	28.00	35.7	55.65	75.3	38.65	76.3	22.50	26.7
17	28.54 36	34.0	55.46	73.6	38.33	74.3	33.45	26.0
27	28.27	21	15	21	38.05	24	9	25 Y
Nov. 6	10	31.9 29.6 23	55.31	71.5 69.0		71.9 29	33.36	25.I
16		27 1 -5	55.20 6	66.1	37.84 15 37.69 7	$65.8 \frac{3^2}{34}$	33.31	24.3
26	28.15	27.1 26	55.14	60 T 30	37.62 -7	62.4 34	33.32 7	23.4
Dez. 6	28.39 24	24.5 ₂₈ 21.7	355.14 7 55.21 7	59.5	37.63 I	58.4	33.39 14	22.0
16	28.74	23	12	34	10	38	33.53	
26	29.20	19.4	55.33 18	56.1	37.73 18	54.6 36	33.73 24	21.5
36	29.77 57	17.2	55.51 23	52.7 32	37.91	51.0 35	33.97 28	21.1
30	29.77	15.4	55.74	49.5	38.16	47.5	34.25	21.0
Mittl, Ort	2 6.46	9.7	54.78	73.9	38.72	73. t	31.50	10.1
see d. tg d	2.775	-2.588	1.288	1-0.812	1.833	+-1.536	1.208	-0.678

	629) 49	Herculis.	630) (2)	Scorpii.	631) ¢	Arae.	633) z () ₁	biuchi.
1913	AR.	Dekl. 	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	16 ^h 48 ^m	15° 6'	16 ^h 48 ^m	42° 12'	16 ^h 51 ^m	55° 51′	16 ^h 53 ^m	9° 30'
Jan. o	5.86	58.2	25.48	50.3	22.34 42	14.9	31.66	23.4
10	0.10	55.8	25.81 33 26.79 37	49.8 5	22.76 46	13.7	31.89	21.2
20	6.37	53.6	20.10	49.5	23.22	12.8	32.16 28	19.1
30	6.66	51.6	20.57	49.5	23.71	12.3	32.44 30	17.3
Febr. 9	6.96	49.9	26.98	49.7	24.23	12.0 -	32.74	15.7
19	7.27	48.5	27.40	50.1	24.76	12.1	33.05 31	14.4
März 1	7.58	47.0	27.02	50.6	25.30	12.4 7	33.36	13.5
11	7.89	47.1	28.23	51.3	25.03	13.1	33.66	13.0
21	8.18	47.1	28.63	52.2	26.34 50	14.0	33.95 29	12.9
31	8.47	47.5	29.01	53.1	26.84	15.1	34.24	13.1
April 10	8.73	48.3	29.38	54.2	27.31 43	16.4	34.50 25	13.8
20	8.97	49.4	29.71 33	55.3 12	27·74 40	18.0	34.75 22	14.7
30	9.19	50.9 16	30.02 28	56.5	28.14	19.7	34.97 20	15.9
Mai 10	9.39 16	52.5 18	30.30	57·7 ₁₃	28.49	21.5	35.17	17.3
20	9.55	54.3	30.54	59.0	28.79	23.4	35.34	18.9
. 30	9.69	56.2	30.74 16	60.2	29.04	25.4 20	35.49 10	20.6
Juni 9	9.79 6	58.2	30.90	61.5	29.23	27.4 20	35.59 8	22.2
19	9.85	60.1	31.01 6	62.8	29.36 6	29.4	35.67	23.9
Juli 9	9.88	61.9	31.07	64.0	29.42	31.3	35.71	25.5
Juli 9	9.87	63.6	31.08	65.1	29.42	33.0	35.71	26.9
19	9.82	65.1	31.04 8	66.2 8	29.35	34.6	35.67	28.2
29	9.74	66.4	30.96	67.0	29.22	36.0	35.60 10	29.4
Aug. 8	9.63	67.4 8	30.83	67.6	29.03	37.1	35.50 13	30.3
18	9.50 16	68.2	30.66	00.1	28.80	37.9	35.37 14	31.0
28	9.34	00.7	30.47	68.3	28.53	38.4	35.23	31.5
Sept. 7	9.17	68.9 -	30.26	68.2	28.24	38.4	35.06 17	31.8
17	8.99	68.8	30.05	67.9 5	27.94 28	38.1 7	34.89 16	31.8
27	8.82	03.4	29.84	07.4 8	27.66	37.4	34-73 15	31.5
Okt. 7	8.07	67.8	29.65	66.6	27.39	36.3	34.58 13	31.0
17	8.53	66.8	29.50	65.6	27.16	35.0	34.45	30.2
27	8.43 6	65.5	29.38	64.4	27.00	33.4 19	34-35 6	29.2
Nov. 6	8.37	63.9 18	29.33	63.2	26.90	31.5	34.29 2	27.9
16	8.35 - 3	62.1	29.33	01.9	26.88	29.6	34.27 4	25.4
Dez. 6	8.38 8	60.0	29.40	60.7	26.96	27.6	34.31 8	24.6
	15	57.5	29.55	59.4	27.10	25.7	34.39	22.6
16	8.6T	55.1 24	29.75 26	58.4 8	27.35	23.8 16	34.53 18	20.3
26	8.79	52.7	30.01	57.6	27.00	22.2	34.71 21	18.2
36	9.01	50.3	30.32	57.0	28.05	20.8	34.92	16.0
Mittl. Ort	7.16	70.0	27.41	47.6	24.93	13.7	32.97	34.2
ec &, tg &	1.036	+0.270	1.350	-0.907	1.782	-1.475	1.014	1 0.16

	6 3 4) ε 1.	lerculis.	637) η ()	phiu c hi.	639) ¢ D	raconis.	640) α II	erculis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	16 ^h 56 ^m	31° 2'	17 ^h 5	15° 37′	17 ^h 8 ^w	65° 48′	17 ^h 10 ^m	14° 28′
Jan. o	56.21	60.2	21.77	12.3	29.14	62.3	39.42	67.9
10	56.44	57.3 28	22.02 28	13.2	29.41	50.0 31	39.64	65.6
20	56.71 29	54.5 24	22.30	14.1 9	29.70	55.7 28	39.89 27	03.3
30 Febr. 9	57.00 31 57.31	52.I 50.I	22.60 32 22.92	15.0 8	30.23 50 30.73	52.9 50.6 23	40.16 30 40.46	61.3 59.6
	33	15	32	- 8	55	17	30	13
März 1	57.64 57.97	48.6	23.24 33	16.6	31.28 31.86 58	48.9 10	40.76 41.07	58.3
II	58.30 33	17.2	23.57 32 23.89 31	17.3 6	30	$\frac{47.9}{47.6} = \frac{3}{3}$	41.37	57·3 56.8 5
21	58.62	17.3	21.20	18.2	33.02	47.0	1167 30	56.7
31	58.92 30	48.0	24.51	18.5	33.56	48.9	41.97	57.0 3
April 10	59.21 26	49.2	24.80	18.6 -	34.07	50.5	42.24 26	57.8
20	59.47	50.9 20	25.07 ₂₅	18.5	34.52 45	52.7	42.50 24	58.9
30	59.70 21	52.9 23	25.32 23	18.4	34.90	55.2	42.74 21	60.3 17
Mai 10	59.91	55.2	25.55	18.2	35.20	58.1	42.95 18	02.0
20	60.08	57.6 26	25.76	17.9	35.42	61.3	43.13	63.8
30	60.21	60.2	25.94	17.6	35.56	64.6	43.29 12	65.8 20
Juni 9	60.30 5	62.9 25	26.08	17.2	35.01	07.9	43.41 8	67.8
19 29	60.36	65.4 25 67.9 23	26.26 ⁷	16.6 ³	35·57 35·43	71.2 31 74.3 31	43·49 5 43·54 7	69.7 71.6
Juli 9	60.33	70.2	26.29 3	16.3	35.22	77.I	43.55	73.3
19	60.26	72.2	26.28	16.1	30	20	40.50	10
29	60.15	72.0	26.22 5	15.9	34.92 34.56	79.7 81.9	43.52 6 43.46	74.9 14 76.3
Aug. 8	60.00	75.3	26.15	15.7	34.13 43	83.6	43.36	77.5
18	59.83 17	76.4 6	26.04	15.5 2	33.65	84.9 8	43.23	78.4 9
28	59.64	77.0	25.90	15.3	33.13	85.7	43.08	79.0
Sept. 7	59.43 22	77.3	25.75 16	15.2	32.59 56	86.0 =	42.91	79.3
17	59.21	77.1	25.59 16	15.0	32.03	85.8	42.74	79.4
Okt. 7	59.00	70.0	25.43	14.9	31.48	85.1	42.56	79.1
Okt. 7	58.80 18 58.62	75.6 74.2	25.28 12 25.16	14.8	30.95 30.46	83.8 17	42.39 ₁₄ 42.25	78.6 s
	14	17	10	0	44	23	12	12
Nov. 6	58.48 10 58.38	72.5 21 70.4	25.06 25.01 5	14.7	30.02 29.65 ³⁷	79.8	42.13 8	76.6
16	58.33	67.9 25	25.00	14.9	29.36	77.1 74.1 30	42.05 42.02 $\frac{3}{4}$	75.2 73.5
2 6	58.33	65.2	25,04	15.2	20.17	708 33	42.00	716
Dez. 6	58.38	62.3	25.13	15.7	29.07	67.2	42.09	69.4
16	58.50	59.0	25.20	16.3	20.08	63.I	10 12 12.2I	66.0
26	58.66	55.9	25.48	17.0 8	20.21	50 1 3/	42.36 15 20	6.1.5
- 36	58.86	52.8	25.71	17.8	29.44	55.8 36	42. 56 20	62.2 23
Mittl. Ort	57.63	74.0	23.22	5.0	31.93	78.2	40.79	79.4
see à, tg à	1.167	+0.602	1.038	-0.279	2.141	1-2.227		+0.258

	641) 6 H	lerculis.	643) π H	erculis.	644) 8 O ₁	hiuchi.	645) ß	1.29 37 58.9 1.66 43 57.6 12 2.55 50 55.5 50 55.5 54.9 3.57 52 54.6 4.62 53 54.8 55.14 51 55.65 49 57.1 16.60 42 57.41 34 62.9 17.75 29 8.04 23 66.6 18.44 11 68.5 170.4 18.58 3 70.2 18.58 3 70.2 18.58 3 70.4 18.58 3 70.2 18.58 3 70.4 18.58 3 70.2 18.58 3 70.4 18.58 3 70.2 18.58 3 70.4 18.58 3 70.2 18.58 3 70.4 18.58 3 70.2 18.58 3 70.4 18.58 3 70.2 18.58 3 70.4 18.58 3 70.2 18.58 3 70.4 18.58 3 70.4 18.58 3 70.4 18.58 3 70.2 18.58 3 70.4 18.58	
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	17 ^h 11 ^m	24° 56′	17" 11"	36° 53′	17 ^h 16 ^m	24° 54′	17 ^h 18 ^m	55° 26	
Jan. o	26.03	15.4 28	59.42	70.0	38.30 26	55.4 3	1.29	58.9	
10	26.25	12.6	59.64 26	$66.8 \frac{3^2}{29}$	38.56	55.7	I.00	57.0	
20	26.50	10.0	59.90 29	63.9 26	38.85	56.1 4	2.00 -	56.4	
30	26.78	7.7 20	60.19	61.3 21	39.17	56.5 5	2.55	222	
f e br. 9	27.07	5.7	60.50	59.2	39.49	57.0	3.05		
19	27.39 31	4.2	60.83	57.5	30.83	57.5	3.57	54.6	
März 1	27.70 31	3.2 6	61.18 35	56.4	40.18	58.0	4.09	54.6	
11	28.02	2.6	61.52 34	55.9 2	40.52 34	58.4	4.02	54.8	
21	28.33	2.7	61.86 34	56.1 6	40.86 34	58.8 4	5.14		
31	28.63	3.2	02.18	56.7	41.18	59.1	5.05	56.1	
\ pril 10	28,91	4.2	62.49	57.9	41.50	59.4	6.14	57.I	
20	20.18	5.6 14	62 777	50.7	41.80 30	50.6	6.60	58.3	
30	20.42	7.2	63.03	61.8	42.08	50.8	7.02	50.7	
Aai 10	20.63	C.1	63.25 18	64.2	12.33	60.0	7.41 39	61.2	
20	29.82	11.7	63.43	66.9 27	42.56	60.I	7.75	62.9	
30	29.97	14.I	63.58	69.7	42.76	60.3	29		
uni 9	30.08	16.5	62.68	72.6	42.93	60.5	8.27		
19	30.15	180 4	63.74	75.4	43.05	60.7	8.44		
29	30.10	21.2	63.75	78.I	43.14	60.9	8.55	70.4	
Juli 9	30.18	23.4	63.72	80.6 25	43.18	61.1			
	5	19	8	23	0	2	2		
19 29	30.13 8	25.3	63.64	82.9 20	43.18	61.3	8.56 8.46	73.9	
\ug. 8	30.05	27.0	63.53 16	84.9 16	43.14 7	61.7	8.30	75.4 76.7	
18	29.93 29.78	29.5	63.37	86.5	43.07 42.95	61.8	8.09		
28	29.76 ₁₇ 29.61	30.2	62.97	88.6	42.81	61.9	7.84 25	77.7 78.4	
	19	4	23	4	16	I	28		
ept. 7	29.42	30.6	62.74 24	89.0	42.65	61.8	7.56	78.7	
17	29.22 20	30.6	62.50 25	89.0	42.48	61.7 2	7.27	78.7	
)kt. 7	29.02 18	30.3 8	62.25 22	88.5	42.31 16	61.5	6.97 28	78.2	
	28.84	29.5	62.03	87.6	42.15	61.2	6.69	77.5	
17	28.67	28.4	61.82	86.2	42.01	60.9 3	6.45	76.4	
27	28.53	27.0	61.65	84.5	41.90 6	60.6	6.25	75.0	
lov. 6	28.43	25.T	61.51 8	82.3	41.84	00.2	0.12	73.3	
16	28.38	23.0	61.43	79.8	41.82	59.9	6.06	71.5	
26	28.37	20.6	01.40	76.9 30	41.85	59.0 2	6.08	69.5	
)ez. 6	28.42	18.0	61.42	73.9 36	41.94	59.4	6.19	67.6	
16	28.53	14.9 28	61.51	70.3	42.10	59.4 _I	6.20	65.5	
26	28.68	12.1 28	6165 14	67.1	42.29 23	59.5 2	6.66	63.8	
36	28.87	9.3	61.84	63.9 32	42.52	59.7	7.00 34	62.2	
Mittl. Ort	27.46	28.1	60.99	83.8	39.89	48.9	3.87	55.6	
ec ò, tg ò		+0.465		-1 0.751		-0.464		1.49	

0.0	648) 5	Arac.	651) a	Arae.	652) \(\lambda\) 8	Scorpii.	653) B Dr	aconis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	17 ^h 23 ^m	60° 36†	17 ^h 25 ^m	49° 48′	17 ^h 27 ^m	37° 2′	17 ^h 28 ^m	52° 21'
Jan. o	11.55	47.7	4.56	34.2	40.09	34.3	25.91	41.3
10	11.95	46.0	4.89 33	33.0	40.36	33.8 5	26.11	$37.8^{\frac{35}{22}}$
20	12.42 52	44.6	5.27	32.0	40.00	33.4 4	26.38	34.6 32
30	12.94 56	43.5	5.68 43	31.3	41.C2 26	33.2	26.70 36	31.7
Febr. 9	13.50	42.6	6.11	30.8	41.38	33.1 _	27.06	29.3
19	14.08	42.2	6.57	30.5 0	41.76 38	33.2	27.44	27.4
März 1	14.68	42.0	7.04	30.5	42.14 39	33.4	27.85	26.2
II	15.28	42.I	7.51	30.7	42.53 39	33.7	28.27	25.5
21	15.88 58	42.6 7	7.98	31.1 6	42.92	34.0	28.69	25.6
31	16.46	43.3	8.43	31.7	43.29 36	34.4	20.09	26.3
April 10	17.02	44.4	8.87	32.5 IO	43.65	34.0	29.47	27.6
20	17.55 53	45.6 16	9.28 41	33.5	44.00 33	35.4 6	29.82 35	29.5
30	18.01	47.2	9.67 39	34.6	44.32	36.0	30.13	31.8 23
Mai 10	18.48 44	48.9 18	10.03	35.9	44.02	36.7 7	30.40 27	34·5 ₃₀
20	18.87 39	50.7	10.34 28	37.2	44.89	37.4 8	30.62	37.5
30	19.21	52.7	TO 62	38.7	45.13	38.2	30.79	40.6
Juni 9	10.47	54.8	10.84	40.3 16	45.22	20 F	30.89	43.0 33
19	19.66	57.0	11.01	41.9 16	45.47	30.0	30.01	47.1
29	19.78	59.I 20	11.12	43.5	45.58 6	40.8	30.93	50.2
Juli 9	19.82	61.1	11.17 -5	45.0	45.64	41.7	30.86	53.1
19	19.78	63.0	11.16	46.4	45.64	42.6	30.73	55.8
29	ro 66	64.8	11.10	47.8	15 60 4	43.3	20.55	58.2
Aug. 8	10.48	66 2 15	10.07	48.0	15.52	44.0	30.31	60.2
18	10.22	for e	10.80	40.8	45 20 *3	44.5	20.04	61.7
28	18.94	68.3	10.59	50.4	45.23	44.8	29.73	62.8
Sept. 7	18.61	68.8	10.35	50.8	18 05	45.0	29.40	63.5
17	18.26 35	68.8	TO TO 23	50.8	1185	45.0	29.45 35	63.6
27	17.91 35	68 1 4	9.84	50.5	44.65	44.8	28.70 35	63.2
Okt. 7	17.58 33	67.6	0.60	40.8	44.46	44.4	28.36 34	62.3
17	17.28	66.4	9.39	48.9	41.29	43.8	28.05 31	61.0
	24	640	17	12	12	9	28	19
27 Nov. 6	17.04	64.9 18	9.22	47.7	44.17	43.0 8	27.77 23	59.1 23
16	16.78	63.1 61.1	9.11	44.8 17	44.07	41.2	27.54 18 27.36	F40
2 6	16.78	58.0	0.07	12 T	44.05	40.3	27.24	54.0 51.0 34
Dez. 6	16.88	56.7	9.16	41.5	44.13	39.4	27.19 5	47.0
	13 21	23	14 18	17		10	14 3	
16	17.09 29	54.4 21	9.34 23	39.8	44.29 20	38.4 7	27.22 11	43.8
26 26	17.38 37	52.3 ₁₈	9.57 30	38.3	44.49 25	37.7 6	27.33 17	40.2
36	17.75	50.5	9.87	37.0	44.74	37.1	27.50	36.7
Mittl, Ort	14.52	44.5	6.83	29.8	41.92	28.5	27.98	55.4
see d, tg d		-1.776		-1.184	4	-0.755		-1-1.297

10.01	656) a 0	phiuchi.	654) 8 8	Scorpii.	658) \$ Se	rpentis.	663) i He	erculis.
1913	AR.	Dekl.	AR,	Dekl.	AR.	Dekl.	AR.	Dekl.
	17" 30"	12° 36′	17 ^h 31 ^m	42° 56′	17 ^h 32 ^m	15° 20'	17 ^h 36 ^m	46° 2′
Jan. o	52.30 21	70.2	1.90	42.0 8	34.74	49.0	58.62 19	54.1
IO	52.51 23	67.9	2.19 33	41.2	34.97 26	49.7 ₈	58.81	50.7 34
20	52.74 26	65.8	2.52	40.5	35.23 28	50.5 8	59.05 28	47.5 28
30	53.00 28	63.8	2.89	40.0	35.51 30	51.3	59.33 32	44.7 24
Febr. 9	53.28	62.1	3.28	39.7	35.81	52.0	59.65	42.3
19	52.57	60.8	3.69	30.5	36.12	52.6	60.00	40.4
März 1	52.88	59.8 6	4.10	30.5	36.44	53.2	60.37 37	39.0
11	54.18	59.2	4.52 42	30.7	36.76	53.6	60.75	38.3
21	54.48 30	50.1	4.04	40.0	37.08 32	53.8 2	61.12 3/	38.3
31	54.78	59.4	5.34	40.5	37.39	53.9	61.49 37	38.9
April 10	55.06	60. I	40 7 Ma	41.0	37.69	53.8	61.84 35	40.0
20	55.33	61.1	5.74 ₃₈ 6.12	417 7	37.98 29	53.6 2	62.17 33	41.8
30	55.58 25	62.4	6.47 35	42.5	28 25 -1	53.3	62.47 30	120
Mai 10	55.81 23	640	6.79^{3^2}	12.1	2851	52.9	62.73	43.9 26
20	56.01	65.8	7.08 29	44.4	38.73	52.5	62.95	49.4
	18	19	26	11	20	4	17	30
30	56.19	67.7 19	7.34 21	45.5	38.93	52.1	63.12	52.4 32
Juni 9	56.33	69.6	7.55 16	46.7	39.10	51.6	63.25 7	55.6 31
19	56.44 6	71.6 18	7.71	47.9	39.24	51.2 4	63.32	58.7 31
Juli 9	56.50	73.4 18	7.83 6	49.I 12	39.33	50.8 3	63.34	61.8
Juli 9	56.53	75.2	7.89	50.3	39.38	50.5	63.30	64.6
19	56.52	76.8	7.90	51.4	39.40	50.2	63.22	67.3
29	56.48	78.2	7.85	52.4	39.37 6	50.0	03.08	69.7
Aug. 8	56.39	79.4	7.76	53.4 7	39.31	49.8 2	62.90	71.7
18	56:28	80.3	7.62 18	54.1	39.21	49.6	62.68 26	73.3
28	56.13	81.0	7.44	54.6	39.08	49.5	62.42	74-5
Sept. 7	55.07	81.5	721	54.0	28.01	49.4	62.14	75.2
17	EE 80 1/	81.6	7 02	54.9	28.77	49.3 0	61.85	75.4
27	55.62	81.5	6.80 22	54.7	28.60	49.3	61.56 29	75.2
Okt. 7	55.45	81.1 4	6.50	54.2	38.45	49.2 0	61.27	74.5
17	55.30	80.4	6.40	53.5	38.31	49.2	61.00	73.3
27	12	70.4	6.25	52.5	11	40.2	60.76	71.6
Nov. 6	55.08	79.4	6.15	51.4	28 72	49.2	60.56	60 5
16	55.03	76.7	6.10	50.3	38.09 3	49.3 2	60.41	660
2 6	O	74.0	6 77	40.0	08 TT	49.5 3	60.32 9	64.1
Dez. 6	55.03 4 55.07	72.9	6.19	47.7	38.17	50.2	60.29 3	60.9
	10	23	10 10	13	15 13	5	3	3
16	55.17 14	70.6	6.35	46.4	38.30 16	50.7 6	60.32 10	57.5 3
26	55.31 18	68.4 23	6.56	45.3 10	38.46	51.3 7	60.42 16	53.7
36	55.49	66.1	6.83	44.3	38.67	52.0	60.58	50.3
Mittl. Ort	53.72	81.2	3.90	36.6	36.23	40.8	60.50	67.4
sec 8, tg 8		-1 0.224		0.931		-0.274		+ 1.03

	661) 1 ₁ 1	'avonis.	664) ω D	raconis.	665) β O	phiuchi.	667) µ 1	Ierculis.
1913	ΛR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. -I-
	17 ^h 37 ^m	64° 40′	17 ^h 37 ^m	68° 47′	17" 39"	4° 35′	17 ^h 43 ^m	27" 45'
Jan. o	8.04	64.2	24.04	39.8	9.03 20	59.8	1.60	63.2 28
10	8.46	62.2	24.26	30.3	9.23	57.9	1.79	60.4 27
20	8.97 56	60.4	24.00	32.9 29	9.46 26	56.2	2.01	57.7 25
30 Waltan	9.53 61	59.0	25.03 51	30.0 25	9.72	54.6	2.20 28	55.2
Febr. 9	10.14	57.8	25.54	27.5	9.99	53.2	2.54	53.1
19	10.79 67	57.0	26.11	25.5 13	10.28	52.0	2.84 31	51.3 11
März 1	11.46 68	50.0	26.72 65	24.2	10.50	51.1	3.15 32	50.2
11	12.14 68	56.5	27.37 64 28.01	23.5	10.89 30	50.6	3.47 32	49.4
21	13.49	56.7	28.64	23.5	11.19	50.5 2	3.79 31	49.3
31	65	57.2 9	59	24.2	29	50.7	4.10	49.6
April 10	14.14 61	58.1	29.23 54	25.5 19	11.77	51.2 8	4.40 29	50.6
20	14.75	59.3	29.77	27.4	12.04 26	52.0	4.69 26	51.9 18
Mai 10	15.32 52 15.84 52	62.5	30.25 39	29.7 28	12.30 24	53.1	4.95	53.7
20	16.31 47	64.4	30.04 30	32.5 35.6 31	12.54 21	54.4 14 55.8	5.19 21	55.8 58.1
	40	20	21	32	19	10	18	25
30	16.71	66.4	31.15	38.8	12.94	57.4	5.58	60.6
Juni 9	17.03	68.7 22	31.26	$42.2 \ 34$ $45.6 \ 34$	13.09 12	58.9 16	5.73 10	63.2
19 29	17.26	70.9	31.26 31.16	45.0 33	13.21	62.0	5.83 6 5.89	65.8 68.3
Juli 9	17.42 17.48 6	73.2 23	30.96	52.0 31	13.30	63.4	5.90	70.7
	3	75.5	29	28	1	13	2	22
19	17.45	77.6	30.67 38	54.8	13.35	64.7	5.88	72.9
Aug. 8	17.33 17.12	79.6	30.29 46 29.83	57.3 21	13.31 7	65.8	5.81 11	74.9 17
18	16.85 27	82.7	29.30 53	59.4 61.1	12 14	67.6	5.7° ₁₄ 5.56 ₁₇	78.0
28	16.51 34	83.8	28.72 58	62.4	13.01	68.2	5.39	79.0
	37	7	62	7	15	68.6	19	7
Sept. 7	16.14	84.5 84.6	28.10 64 27.46 65	63.1 $63.4 \frac{3}{3}$	12.86	68.7	5.20	79.7
17 27	15.73	84.4	26.81	62 T 3	T2 52 17	68.7	4.78	79.9
Okt. 7	14.91	83.7	26 17 04	62.3	12.27	68.4	4 577	70.2
17	14.55	82.6	25.57	60.9	12.22	68.0	4.37 18	78.4
· ·	30	15	55	18	12	7	17	13
Nov. 6	14.25	81.1	25.02 49	59.1 56.8 23	12.10	67.3 66.4	4.22	77.I
16	13.88	79.3 21 77.2	24.53 41 24.12 20	54.I 27	11.96	65.2	4.00	75.4 21
26	13.84 -	74.0	22.82	50.0	11.96	63.0	3.06	73.3 23 71.0 26
Dez. 6	13.91	72.5	23.62	47.6	12.00	62.4	3.06	68.4
16	14.08	24	9	30	9	60.8	0	28
26	16 TA 20 31	70.1 26 67.5 21	23.53 4	40.0	17 12.23 14	r S S 20	4.02 4.14 16	65.6
36	14.77	65.4	23.57 ₁₇ 23.74	36.3 37	12.42 19	57.0	4.30	59.6 29
							_	
Mittl, Ort	11.43	60.0	27.52	53.8	10.45	70.T	3.16	75.3
see 8, tg 8	2.339	2.1[4]	2.76.4	+2.578	1.003	+0.080	1.130	-1-0.527

Jan. 0 24.8 10 25.0 20 25.3 30 25.8 Febr. 9 26.4 März 1 27.7 11 28.5 21 29.2 23 29.9 April 10 30.6 20 31.3 30 32.9 Juni 9 32.6 Juni 9 32.6 Juni 9 32.6 Juni 9 32.6 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	-	AR.		-				
Jan. 0 24.86 10 25.03 20 25.3 30 25.8 Febr. 9 27.06 März 1 27.7 11 28.56 21 29.2 31 29.9 April 10 30.6 20 31.3 30 32.9 Juni 9 32.6 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	40 ^m 70° 7	1110.		Dekl.	AR.	Dekl. +	AR.	Dekl.
To 25.00 20 25.30 30 25.80 Febr. 9 26.4 19 27.70 11 28.50 21 29.2 31 29.9 April 10 30.6 20 31.3 30 31.8 Mai 10 32.3 30.6 30 32.9 Juni 9 32.6 30 32.9 Juli 9 32.6 19 32.6 19 32.3 30.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	43 74 1	1' 17 ^h 51	m	56° 52′	17 ^h 53 ^m	37° 15′	17 ^h 53 ^m	76° 58′
To 25.00 20 25.30 30 25.80 Febr. 9 26.4 19 27.70 11 28.50 21 29.2 31 29.9 April 10 30.6 20 31.3 30 31.8 Mai 10 32.3 30.6 30 32.9 Juni 9 32.6 30 32.9 Juli 9 32.6 19 32.6 19 32.3 30.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	30 17.1	59.01		56.8	14.41	29.2	1175	17.2
20 25.3° 30 25.8° Febr. 9 26.4° März 1 27.7° 11 28.5° 21 29.2° 31 29.9° April 10 30.6° 20 31.3° 30 32.9° Juni 9 32.6° Juni 9 32.6° Juli 9 32.3° 29 32.9° Juli 9 32.6° Aug. 8 31.3° 18 30.6° 28 29.9° Sept. 7 29.2° 17 28.4° Okt. 7 26.9° 17 26.1° Nov. 6 24.8° 16 24.3°	44	59.18	41	17	14.58	26.0 32	14.75	17.3
März i 27.00 März i 27.00 März i 27.70 II 28.50 21 29.2 31 29.9 April 10 30.6 20 31.3 30 31.8 Mai 10 32.3 30 32.9 Juni 9 32.6 30 32.9 Juli 9 32.6 19 32.3 30 32.9 Juli 9 32.6 29 32.9 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 0kt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3		59.42		53·3 34 49·9 30	14.79	23.0	15 26 35	TO 5 33
Febr. 9 26.4 März 1 27.0 März 1 27.7 11 28.5 21 29.2 31 29.9 April 10 30.6 20 31.3 30 32.9 Juni 9 32.6 Juni 9 32.6 Juli 9 32.3 Juli 9 32.3 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 06.1 Nov. 6 24.8 16 24.3		59.73	31	16 n 30	T5.01	20.2	15.02	7 5 30
März i 27.00 März i 27.77 ii 28.50 21 29.9 April io 30.6 20 31.3 30 31.8 Mai io 32.3 30 32.9 Juni 9 33.0 19 32.6 Juli 9 32.6 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3		60.09	30	14.3	15.33	17.9	16.61	4.8 27
März 1 27.7 11 28.5 21 29.2 31 29.9 April 10 30.6 20 31.3 30 31.8 Mai 10 32.3 20 32.6 Juni 9 33.0 19 33.0 29 32.9 Juli 9 32.3 18 30.6 28 29.9 Sept. 7 29.2 17 26.1 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	65	20	40	21	31	19	84	19
Juni 9 32.3 Juni 9 32.9 Juni 9 32.6 Juli 9 32.3 Aug. 8 31.3 18 30.6 29 32.9 Juli 9 32.6 Nov. 6 24.8 16 24.3	71	60.49	43	12.2	15.64	16.0	17.45	2.9 16
April 10 30.6 20 31.3 30 31.8 Mai 10 32.3 20 32.6 Juni 9 33.0 19 32.9 Juli 9 32.6 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 26.9 17 26.1 Nov. 6 24.8 16 24.3		7 60.92	44	40.7 8	15.97	14.0	18.36	
April 10 30.6 20 31.3 30 31.8 Mai 10 32.3 20 32.6 Juni 9 33.0 19 32.9 Juli 9 32.3 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 26.9 17 26.1 Nov. 6 24.8 16 24.3	75 0.4	61.36		39.9	10.31	13.8	19.32	0.4 2
April 10 30.6 20 31.3 30 31.8 Mai 10 32.3 20 32.6 Juni 9 33.0 19 32.9 Juli 9 32.6 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 06.1 Nov. 6 24.8 16 24.3	72	6 61.82		$39.6 - \frac{3}{5}$	10.05	13.6	20.31	0.2
Juni 9 32.3 Juni 9 33.0 Juli 9 32.3 Juli 9 32.3 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	70	62.27	43	40.1	16.98 33	14.0	21.28	0.7
Mai 30 31.8 Mai 10 32.3 20 32.6 31.8 Juni 9 33.0 19 33.0 29 32.9 Juli 9 32.3 29 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	68 63 2.1	62.70	40	41.2	17.31 31	15.0	22.21 8	т 8
Mai 10 32.3 32.6 32.6 32.9 32.9 33.0 19 33.0 29 32.9 32.9 32.6 19 32.3 31.8 30.6 28 29.9 Sept. 7 29.2 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	31 6 3.9	63.10	36	42.9 22	17.62 31	16.5	23.00	3.5
Juni 9 32.6 Juni 9 33.0 19 33.0 29 32.9 Juli 9 32.3 29 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	37 ₄₆ 6.2	,, 63.46	22 "	45.1	17.91 26	18.4	23.80 6	E 77
Juni 9 33.0 19 33.0 29 32.9 Juli 9 32.3 29 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	33 26 8.9	63.78	27	47.8	18.17	20.7 27	24.42	8.0
Juni 9 33.0 19 33.0 29 32.9 Juli 9 32.3 29 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 26.9 17 26.1 Nov. 6 24.8 16 24.3	9 11.9	64.05	20	50.7	18.39	23.4	24.90	11.3
Juni 9 33.0 19 33.0 29 32.9 Juli 9 32.3 29 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 26.9 17 26.1 Nov. 6 24.8 16 24.3	23	64.25		53.9	18.58	26.2	25.21	14.5
Juli 9 33.0 29 32.9 32.6 19 32.3 29 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 26.9 17 26.1 Nov. 6 24.8 16 24.3	18.5	64.39	*4	57.2 33	18.73	20.I 29	25 27 -	T7 8 33
Juli 9 32.9 32.6 19 32.3 31.8 30.6 28 29.9 Sept. 7 29.2 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	21.0	64.47	0	60.6 34	18.84	32.1	25.36	21.2
Juli 9 32.6 19 32.3 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 26.1 Nov. 6 24.8 16 24.3	25.1	64.47	0	63.9 33	18.80 5	25 0	25.10	24.5 33
19 32.3 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8		64.41	0	67.0	18.90	37.8	24.84	27.6 31
29 31.8 Aug. 8 31.3 18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	36	64.28	13	70.0 .c	18.86	20	4	
Aug. 8 31.3 30.6 28 29.9 Sept. 7 29.2 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	40	64.09		72.6	18.78	40.4	24.35 6	4 30.5 27
18 30.6 28 29.9 Sept. 7 29.2 17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	40	63.84	45	740 23	18.65	42.7	23.71	25 5
28 29.9 Sept. 7 29.2 17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3		63.55	24	76.7	1840	16.4	22.08	27 4
Sept. 7 29.2 28.4 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	100	63.20	35	78.2	18.29	47.7	21.12	6 37-4 14
17 28.4 27 27.6 Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	74	9	37	9	23	9	10	2 10
Okt. 7 27.6 17 26.1 Nov. 6 24.8 16 24.3		3 62.83 62.43		79.1 79.6	18.06	48.6	20.10	8 39.8
Okt. 7 26.9 17 26.1 Nov. 6 24.8 16 24.3	40 79 40.I	-	40		1 25	49.0	19.02	8 40.2
17 26.1 27 25.4 Nov. 6 24.8 16 24.3	//	8 62.03	20	79.5	17.57	48.9	17.94	8 40.2 6
Nov. 6 24.8	73	12 61.64 61.26	20	79.0 11	17.33 23	48.5 10	16.86	4 39.6
Nov. 6 24.8	60	18 01.20	35	77.9	17.10	47.5	15.82	8 38.5
16 24.3		60.91	30	76.3	16.90	46.2	TA 84	36.9 20
16 24.3	88 52 33.8	27 60.61	25	74.2	16.73	44.4	13.95	6 34.9 26
	36 31.1	00.30	.0	71.7	16.61	42.2	13.19	32.3 29
26 23.9	96 28.1	34 00.18	11	68.8	16.53	39.6	12.57	29.4 32
Dez. 6 23.6	68 24.7	35 60.07	2	05.5	10.50 -	0	12.10	20.2
16 23.5		60.04	6	62.0	16.53	227	11.82	22.8
26 1823.5	54 . 17.2	⁴⁰ 20 60.10	0	58.1 39	16.62	30.3	11.72	18.0
36 23.6	68 14 13.6	60.23	13	54.5	16.77	27.1	11.83	15.3
Mittl. Ort 28.9	96 30.5	61.45	5	69.6	16.14	41.2	20.51	30.0
sec 8, tg 8 3.2				+1.533				-1-4.322

115 11	673) v ()	phinchi.	676) γ Draconis. 677) 67 Ophic			phiuchi.	679) γ Sa	gittarii.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
70.71	17 ^h 54 ^m	9° 45′	17" 54"	51° 29′	17 ^h 56 ^m	2° 55'	18 _p 0 _m	30° 25′
Jan. o	12.71	58.7 10	32.96	42.8	15.80	55.7 17	11.41	42.0
10	12.01	50.7	22.12	30.2 35	T5 00 19	54.0 16	11.63 26	41.7
20	13.14 26	60.6	33.35 28	26 T	16.21	52.4	11.80	41.4 3
30	12.40	61.5	2262	22 1	16.45	50.0	12.18	41.2
Febr. 9	13.68	62.4	22.05	30.5	16.72	49.5	12.50 32	41.1
	30	7	30	21	28	11	34	0
M	13.98	63.1	34.31 39	28.4	17.00 29	48.4 8	12.84	41.1
März 1	14.20	63.6	34.70	26.0	17.29 30	47.6	13.19 35	41.1
11	14.59 31	63.9	35.11	26.0	17.59 31	47.2	13.54 36	41.1
2.1	14.90 31	64.0	35.52	25.8	17.90	47.0 -	13.90 35	41.1
31	15.21	64.0	35.92	26.2	18.19	47.2	14.25	41.1
April 10	15.51	63.7	36.31	27.0	T8 40	47.7 8	14.60	41.1
20	15.81	62.2	36.68 3/	28.0	18.77	48.5	14.93 33	41.2
30	16.08 */	62.6	37.01 33	31.0	10.04	40.6	15.26 33	41.3
Mai 10	16 24 20	61.9 7	37.31	33.6	10.20	50.8	TE 56 30	41.4
20	16.58 24	61.1	37.56 ²⁵	36.5	19.52 23	52.2	15.84	41.6
	2.1	9	20	31	20	15	25	2
30	16.79 18	60.2	37.76	39.6	19.72	53.7 16	16.09 22	41.8
Juni 9	16.97	59.4	37.91	42.9	19.89	55.3	16.31 18	42.1
19	17.12	58.5	38.00	40.2	20.03 10	56.8	16.49	42.5
29	17.23	57.8	38.02 -	49.4	20.13 6	58.3	16.62	42.9
Juli 9	17.30	57.1	37.99	52.5	20.19	59.7	16.71	43.4
19	17.33	56.4	27.00	55 2	20.21	60.0	16.75	43.9
29	17.32	55.9	27.75 13	57.0	20.19	62.0	16.75	44.4
Aug. 8	17.27	55.5	27 55	60.2	20.13	63.0	1670	44.0
18	T7 T8 9	55.2	37.31	02. T	20.04	62.8	16.60	45.4
28	17.06	54.9	37.02 29	63.5	19.92	64.4	16.47	45.7
C	14	. 2	32	10	15	4	10	3
Sept. 7	16.92		36.70	64.5	19.77 16	64.8	16.31 17	46.0
17	16.76	54.7	36.37 34	65.0	19.61	65.0	16.14 19	46.1
27	16.60		36.03 34	64.9	19.44 16	65.0	15.95 18	46.1
Okt. 7	16.44	54.7 2	35.09 32	64.4	19.28	64.9	15.77 16	46.0
17	16.29	54.9	35.37	63.4	19.13	64.5	15.61	45.7
27	16.17	CCT	35.08	61.8	TO.00	62.0	YE 477.	45.4
Nov. 6	16.08	55.4	34.82	50.8	18.91	62 T	T5.36	44.0
16	16.03	55.0	34.61 "	57.4	1 TX Xc	62.1	15.30	44.4
26	16.02	56.4	34.47	516	18 82 -	60.0	15.20	12.8
Dez. 6	16.06	57.I	34.39	51.4	18.86	59.5	15.34	43.3
16	16.15) 0	1 1	33		-8 C	75.40	42.8
2 6	20		34.38 -7		19.06	160		42.0
20	16.30	58.8	34.45	44.4 35	19.00	56.2	15.59 21	42.3
36	16.48	59.7	34.58	40.7	19.23	54.6	15.80	41.9
Mittl. Ort	14.18	49-4	35.13	55-3	17.25	65.8	13.09	33.9
sec δ, tg δ	1.015	-0.172	1.606	+1.257	1.001	+0.051	1.159	-0.58

	680) 72 0	phiuchi.	681) o II	ferculis.	682) μ Sa	gittarii.	688) η Se	rpentis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	18h 3m	9° 32′	18 ^h 4 ^m	28° 44′	18h 8n	21° 4′	18 ^h 16 ^m	2° 55′
Jan. o	12.02	52.0	7.29 16	48.1	32.05	66.0	47.00 17	30.0
10	12.19	50.0	7.45	45.2 28	32.25	00.2	47.17	31.3
20	12.40	48.1	7.65	42.4 25	32.48 27	66.5	47.38	32.5
30	12.64 26	46.3	7.89 26	39.9 22	32.75 29	66.7	47.61 26	33.7
Febr. 9	12.90	44.8	8.15	37.7	33.04	67.0 2	47.87	34.8
19	13.17	43.5 10	8.44	35.9 13	33.34	67.2	48.14	35.7
März 1	13.46	42.5	8.74	34.6	33.00	67.4	48.43	36.3
11	13.70	42.0	9.00	33.8	33.90	67.4	48.73 30	30.0
21	14.00	41.8	9.38 32	33.6 -	34.31 33	67.4	49.03	36.7
31	14.36	42.0 6	9.70 31	33.9	34.64	67.3	49.33	36.6
April 10	14.65	42.6	10.01	34.7	34.07	67.1	40.62	26. I
20	14.04	43.6	10.30	26.0	35.28 31	66.9	49.92 28	25.4
30	15.21	44.0	10.58 28	27.7	35.59 31	66.6 3	50.20	34.5
Mai 10	15.46	46.4	10.84	30.8	35.87	66.2	50.47	33.4
20	15.69 23	48.1	11.07 23	42.2	36.14	65.9 3	50.71	32.3
30	15.89	49.9	11.27	44.8	36.38	65.5 4	50.94	31.0
Juni 9	16.06	51.8	11.44	47.5 27	36.59	65.3	ET 12	29.7
19	16.20	527 19	TT 56 12	502 -/	36.76	65.0 3	51.20	28.5
29	16.20	55.5	11.64	528	36.89	64.0	FTAT	27.2
Juli 9	16.36	57.2	11.68 4	55.4	36.98	64.8	51.49	26.1
	2	10	I	24	5	0	5	10
19	16.38 -	58.8	11.67	57.8	37.03	64.8	51.54 0	25.1
Aug. 8	16.36 6	60.3	11.62	59.9	37.03	64.8	51.54 4	24.2 8
18	16.30	61.5	11.53	61.8	36.99 8	64.9	51.50 8	23.4 6
28	16.08	. 8	11.40	63.4	36.91 11	65.0 ₁	51.42	4
· .	10.00	63.4	11.23	64.7	15	I	51.31	22.4
Sept. 7	15.93 16	63.9	11.04	65.5	36.65 16	65.2	51.18 16	22.1
17	15.77	04.2	10.84	0.00	36.49	65.2	51.02 16	21.9
27	15.59 17	64.3 2	10.62	66.I 3	30.32	65.2	50.86	21.9
Okt. 7	15.42 16	64.1	10.41	05.0 7	36.16	65.2	50.69 15	22.0
17	15.26	63.7	10.21	65.1	36.01	65.2	50.54	22.3
27	15.13	62.9	10.04	62.0	35.87 10	65.1	50.41	22.7 6
Nov. 6	15.02	61.9	9.89	62.4	35.77 6	65.0	50.30 7	23.3 7
16	14.95	60.7	9.78	60.5	35.71	64.9 0	50.23	24.0
26	14.92	59.2 17	9.71 7	58.3	35.70	64.9	50.20	24.8
Dez. 6	14.93	57.5	9.70 -	55.8	35.73	64.9	50.21	25.8
16	14.00	557	9.73 9	53.I 21	35.81	64.9	50.27	27.0
26	15.11	525	0.02	r00 31	25.05	65.0	50.38	28.2 13
36	15.26	51.6	9.96	47.2	36.13	65.2	50.53	29.6
Mittl. Ort	13.48	62.5	8.91	59-3	33.61	57.I	48.47	20.I
ec δ, tg δ	-	+0.168		+ 0.548		0.386	,	

- 1	689) ε Sagittarii.		690) 109	Her c ulis.	691) a Te	lescopii.	695) χ Draconis.		
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	18 ^h 18 ^m	34° 25′	18h 19m	21° 43′	18 ^b 20 ^m	46° 1′	18 ^h 22 ^m	7 2° 41′	
Jan. o	22.08	44.5 6	57.85	35·3 ₂₆	29.30	10.6	32.88	33.0	
10	22.30	43.9 6	58.00	32.7	29.54 29	9.1	32.98	29.3 37	
20	22.55	43.3 .	58.19	30.2 23	29.83	7.9 11	33.22 37	25.9 34	
30	22.84 31	42.8	58.41	27.9 20	30.16 33	6.8	33.59 48	22.6 28	
Febr. 9	23.15	42.3	58.66	25.9	30.52	5.8	34.07	19.8	
19	23.49	42.0	58.93	24.2	30.91	5.0	34.67	17.4	
März I	22 85	41.6	50 22 29	220	31.33 42	4.3	34.07 67 35·34 72	T5.5	
11	24.21	4T 4	50.52	22.2	31.75	3.8	26.07 13	T4 2	
21	24.58 37	412	50.82	21.0	32.10	2.5	36.83	13.7	
31	24.95	41.0	60.13	22.I	32.62 43	3.4	37.60 77	13.8	
April 10	37	I	31	22 9 7	43	0	74	7	
-	25.32 25.68 36	40.9	60.44	22.8	33.05 42	3.4 2	38.34 71	14.5	
20	26.03 35	40.9	60.73	24.0	33.47	3.6	39.05 65	15.9	
Mai 10	26.36 33	41.0	61.28 26	25.5 19	33.88	4.0	39.70 56 40.26	17.8	
20	26.67 31	41.1	. 24	27.4	34.26 36 34.62	4.5 7	4/	20.2	
20	28	41.3	61.52	29.5	34.02	5.2	40.73	23.0	
30	26.95 24	41.6	61.74	31.8	34.94 28	6.1	41.09 24	26.1	
Juni 9	27.19 20	42.0 6	61.92	34.2	35.22	7.1	41.33	29.4	
19	27.39 16	42.6 6	62.06	36.7 25	35.46	8.3	41.45	32.9	
29	27.55	43.2	62.17 6	39.2	35.64	9.5	41.44	30.3	
Juli 9	2 7.66	43.9	62.23	41.5	35.76	10.8	41.30	39.0	
19	27.72	44.6	62.25	12.7	35.83	T2.T	41.04	42.8	
29	27.73	45.3 7	62 22 3	157	25.83	13.4	40.67 37	45.7	
Aug. 8	27.69	46.0	62.16	17.5	25.78	14.7	10 18 49	18 1 -/	
18	27.61	46.7 6	62.06	49.0	35.67	T5.8	39.60 66	50.7	
28	27.48	47.3	61.92	50.2	35.52	16.8	38.94	52.6	
Sept. 7	16	4	61.76	9	19		38.22	14	
Sept. 7	27.32 18	47.7	61.57	51.1	35.33 22	17.5	77	54.0 9	
27	27.14 19	48.1	61.38	51.8 -	35.11	18.2	37.45 80 36.65 8	EE 2 -	
Okt. 7	26 75	18 T	61.19	51.6	34.63	18.1	35.84 50	EE 2	
17	26.57	47.8 3	61.00	51.1	34.41	17.7	35.04 79	54.6	
•	16	3	16	9	20	7	75	12	
Nov. 6	26.41	47.5 6	60.84	50.2	34.21 16		34.30 69		
Nov. 6	26.29 8	46.9 6	60.70	49.0	34.05 IC		33.61 61	51.7 22	
16	26.21	46.3 8	60.60	47.4 19	33.95	15.0	33.00	49.5 26	
Dez. 6	$26.18 \frac{3}{2}$	45.5 7	60.54	45.5 21	33.90	13.7	32.40	40.9 30	
Dez. 6	26.20	8	60.52	43.4	33.91		32.08	43.9	
16	26.27	44.0	60.55	ATT	33.99	10.8	31.81	40.6	
26	20.40	42.2	60.63	38.6	04 70	9.4 16	31.08	37.0	
36	26.60	42.4	²⁶ 60.76	35.8	2634.36	7.8	31.69	33.1 ³⁹	
Mittl. Ort	23.84	35.8	59.42	45.8	31.36	2.1	37.59	43.3	

	694) b 1	raconis.	698) \$	Pavonis.	699) α	Lyrae.	703) 110	He rc ulis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
13. "17.	18h 22m	58° 44′	18h 32m	71° 30′	18 ^h 33 ^m	38° 41'	18h 41m	20° 27
Jan. o	35.68	49.7	48.21	24.0 28	57.68	57.5	53.45	34.6
10	35.79 20	46.0 3/	48.59	21.2	5780 "	PA 4 3-	53.58	22.1
20	35.99 26	12 5 33	49.09 6	186	57.96	51.4 29	53.75	20.8
30	36.25	39.3 28	49.69	16.2	58.18	48.5	53.95	27.6
Febr. 9	36.58 38	36.5	50.38	14.3	58.43	46.0 21	54.18	25.6
19	36.06	34.1 18	51.14	12.5	58.71	12.0	54.43 28	23.0
März 1	37.38 42	32.3	51.96	IT T	59.02	12.2	5471	226
11	37.82 44	31.2 6	52.82	100	59.35 33	41.1	55.00	2 T X
21	38.20	30.6	53.70	0.4	59.68 33	40.6 -	EE 20 30	
31	38.76 47	30.8	54.60	Q. I	60.03	40.7	55.60	21.0
April 10	39.23	31.6	FF 48	0.1	60.37	41.4	55.91	22.2
20	39.67	32.9	56.24	06 5	60 70 33	42.7	56.21	23.2
30	40.08	34.0	57.17	10.5 9	61.02 32	44.4	56 50 29	247
Mai 10	40.45	37.3 24	57.95	11.7	61.32 30	16.6	56 78	26 5
20	40.77	40.2	58.67	13.2	61.59 27	49.2	57.04	28.5
20	26	31	6.	18	61.82	28	23	23
Juni 9	41.03 19	43.3	59.31 59.85	15.0 21	62.01	52.0	57.27 20	30.8
-	12	50.0 34	60.29	17.1	62.16	55.0 31 58.1	57.47 16 57.63	33.2 25
19 29	41.34 6 41.40 -		60.62	19.3 25	62.27	61.2	13	35.7 38.1
Juli 9	41.37	53.5 56.8 33	60.82	25	62.32 5	64.2 30	57.76 9	40.5
oun 9	9	32	8		0	28	4	23
19	41.28	60.0	60.90	26.8	62.32	67.0	57.89	42.8
1 29	41.11	62.9 26	00.85	29.3	0	69.7	57.89	44.8
Aug. 8	40.88	65.5 22	60.69		62.18	72.1	57.84 9	46.7 16
18	40.60	67.7	60.40	33.5 18	62.04 18	74.2	57.75 12	48.3
28	40.20	69.6	60.02 47	35.3	61.86	75.9	57.63	49.6
Sept. 7	39.88	71.0 9	59.55	36.7	61.65	77.2 9	57.48	50.6
17	39-47 43	71.9	59.0I	37.0	61.41	78.I	57.31 10	51.3
27	39.04	72.3 =	58.44 57	38.0	61.16	78.5	57.12 10	51.0
Okt. 7	38.01	72.I 6	57.07	38.0	00.91	78.5	56.93 10	51.6
17	38.19	71.5	57.30	37.4	00.00	78.0	56.74	51.2
27	37.80	70.2	56.79	36.3	60.43	77.1	56.57	50.5
Nov. 6	27.45 33	68.6	E6 24 45	218 15	60.22	75.7	56.42	40.4
16	27.T/	66.4 26	55.00	32.0	60.07	73.8	56.32 8	48.1
26	36.90	63.8	55.76 11	20.6	59.95	71.6 22	56.24	46.4 20
Dez. 6	36.73	60.8	55.65	28.0	59.88	69.0	56.21 3	44.4
16	36.63	57.6	55.68	25 2	59.86	66.2	56.22	42.2
26	36.62	54.T 33	55.85	22.6	r080 3	63.2	56.27	20.0 23
36	²⁷ 36.69 ⁷	50.2 39	56.18 33	19.5	59.89 10	59.8 34	a156.38	37·3 ₂₆
Mittl. Ort	38.42	60.0	52.50	15.4	59.56	67.5	55.03	44.4
sec o. tg o	1.928	+1.648	3.152	-2.990	1.281	+0.801	1.067	+0.373

empl (704) À	Pavonis.	705) β	Lyrae.	706) o Sa	gittarii.	707) o D	raconis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
11 "41 "	18 ^h 44 ⁿ	62° 17'	18h 46m	33° 15′	18 ^h 49 ^m	26° 24′	18 ^h 49 ^m	59° 16′
Jan. o	6.59	28.3 26	50.28	30.8	50.68 18	30.8	52.21	46.1 ₃₈
10	6.87	5 25.7 22	50.40	27.7 29	50.86	30.5	52.28	42.3
20	7.22	23.5 21	50.55	24.8 27	51.06	30.2 3	52.42	28.0
30	7.64	7 21.4 19	50.74	22.I	51.30 26	29.9 3	52.64 29	35.6
Febr. 9	8.11	19.5	50.97	19.6	51.56	29.6	52.93	32.6
19	8.64	6 17.8	51.24	17.6	51.85	29.3	53.28	30.0 20
März 1	9.20 6	76 4 14	51.53 30	16.0	52.10	20.0	53.67	28.0
11	9.80 6	15.3	51.83 32	14.0	52.48 32	28.7	54.11 46	26.5 8
21	10.41 6	14.6	52.15 32	14.4 0	52.82 34	28.3 4	54.57 48	25.7 2
31	11.03	14.1	52.47	14.4 6	53.16 34	27.8	55.05	25.5 -
April 10	11.66	13.0 -	52.80 33	15.0	53.50	27.3	55.53 46	26.0
20	12.27	14.1	53.13 33	16 T	52.84	26.8	55.00	27.1
30	12.87	T15 4	53.44	17.7	E4 18 34	26.4	56.42	28.8
Mai 10	13.43	15.3	52.72	10.8	54.50	25.9	56.82	31.1 26
20	13.96	16.4	54.00	22.2	54.80	25.6 3	57.19	33.7
30	14.44	דיין דיין	54.24	24.8	29	25.3	31	36.7
Juni 9	14.86	19.3	54.45	27.7	55.09 25	25.0	57.5° 24 57.74	40.0
19	TE 21 3	21.2	54.62	30.6	55.34 22 55.56 18	24.0	57.0T	12.1
29	15.40	22.1	54.74	22 5	55.74	240	58.0T	46.0
Juli 9	15.68	25.2	54.81	36.4	55.87	25.0	58.03 -	50.3
	10	21	3	28	9	3	5	33
19	15.78	27.3	54.84 -	39.2 26	55.96	25.3	57.98	53.6 32
Aug. 8	15.80		54.82	41.8 23	30.00	25.6	57.86	56.8 29
18	15.73		54.75	44.I 20 46.I 17	55.99 5	25.9 26.3	57.67 26	59.7 25
28	15.58		54.64	47.8	55.94 9	26.7	57.41 32	64.4
	15.35		54.49	14	55.85	4	57.09 36	18
Sept. 7	15.06	36.2	54.31	49.2	55.72	27.I 3	56.73 40	66.2
17	14.72	37.1	54.10	50.1	55.57	27.4 2	56.33 42	67.5 8
27	14.35	, 37.6	53.88	50.6	55.40 18	27.6	55.91	68.3
Okt. 7	13.98	37.8 -	53.05	50.7 -	55.22	27.8	55.47	00.0
17	13.61	37.4	53.42	50.4 8	55.05	27.8	55.04	68.3 8
27	13.27	36.6	53.21 18	49.6	54.00	27.8	54.63 38	67.5
Nov. 6	12.97	25 1	53.03	48.4	54.77	27.6 2	54.25	66.2 18
16	12.74	33.0	52.88	46.7 19	54.68	27.4	53.91 28	64.4 24
26	12.59	22 T	52.76	44.8	54.62	27.1 3	53.63	62.0 27
Dez. 6	12.53 -	29.9	52.69	42.5	54.62	26.8 3	53.41	59.3
16	12.56	27.6	52.68	39.9 28	54.66	26.5	53.27	56.3
26	12.68	25.2	52.71 8	27.I	5475	26.1	52.20	52.9 38
36	31 12.92	22.6	52.79	33.9	33 54.90 I5	25.8 ³	53.22	49.1
Mittl. Ort	9.52	18.4	52.06	39.9	52.27	20.6	55.11	54.2
sec o, tg o	2.150	1.904	1.196	+0.656		-0.497		+1.683

	708) \(\lambda\) Te	le sc opii.	709) 🖁 Serp	entis pr.	711) R	Lyrae.	713) γ Lyrae.	
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.
	18h 51m	53" 3'	18 ^h 51 ^m	4° 5′	18h 52m	43° 49′	18 ^h 55 ^m	32° 33′
Jan. o	28.00	22.5	52.19	12.7	39.21	43.0 36	39.55 11	61.9
10	28.24	20.4	52.33 16	11.0	39.30	39.4	39.66	58.7 28
20	28.51	18.5	52.49 20	9.5	39.44	36.2	39.80	55.9 27
30	28.84	16.8	52.69 23	8.0	39.64	33.2 27	39.98	53.2
Febr. 9	29.21	15.2	52.92	6.8	39.87	30.5	40.20	50.8
19	29.63	13.8	53.17 26	5.8 8	40.15	28.1	40.46	48.7 16
März 1	30.07	12.6	53.43 28	5.0	40.46	26.3	40.74 30	47.1
11	30.54	11.5 8	53.71	4.6	40.79 25	25.0 7	41.04 31	46.0
21	31.02 49	10.7 6	54.00	4.5 2	41.14 37	24.3	41.35	45.4
31	31.51	IO.I 3	54.30	4.7	41.51 36	24.2 -	41.68 33	45.4
April 10	32.00	0.8	54.61	5.2	AT 87	24.7	42.00	45.9
20	32.49 49 48	9.7	54.00	6.2	42.23	25.8	42.33 33	47.0
30	32.97 46	9.9	55.20 28	7.3	42.58 35	27.5	12.64	48.6
Mai 10	33.43 44	10.3	55.48 26	8.8	42.90 32	29.6	42.94 30	50.6
20	33.87	11.0	55.74	10.3	43.19	32.1	43.22	52.9 23
30	34.26 39	11.9	55.99	12.0	43.45	35.0	43.47	55.5
Juni 9	34.62	13.0	56.20	12.8	43.67	28.1	43.68	58.3
19	34.92	14.3	56.30	T5.5	12.81	41.3	43.85	61.3
29	25 16 24	TE 8 15	1651	17.2	43.96	44.5	43.98	64.2 29
Juli 9	35.34	17.4	56.65	18.9	44.03	47.8 33	44.07	67.1 ²⁹
19	11	19.1	56.72	20.4	1	31	4	69.9
29	35.45 35.49 4	20.8	56.74 -	21.7	44.04 5	50.9 29	44.10	72.5
Aug. 8	35.46	22.4	1672	22.9	43.99	53.8 26 56.4	44.04	74.8 23
18	25 27	24.0	56.67	220	43.90 15	58.8 24	43.94	76.9
28	35.21	25.3	56.57	24.7	43.56	60.7	43.80	78.7
	21	12	12	6	22	16	18	14
Sept. 7	35.00 24	26.5 8	56.45	25.3	43.34 26		43.62	80.1
17	34.76	27.3 6	56.30 16	25.7	43.08 27	63.5	43.42	81.1
Okt. 7	34.49 29	27.9 28.1 ²	56.14 16	25.9	42.81 28		43.20	81.7
ORt. 7	34.20 27	27.9	55.98 16 55.82	25.9 2	42.53 28	64.4	42.76	81.9
	33.93 26	5	15	25.7	42.25	8	42.70	7
27	33.67	27.4	55.67	25.2 6	41.99 24	63.4	42.55	80.9
Nov. 6	33.46	26.5	55.54 9	24.6	41.75	62.2	42.36	79.8
16		25.3 15	55.45 6	23.7 10	41.55 16	60.5	42.21	78.3
26 Dez. 6	33.18	23.8 16	55.39 2	22.7	41.39 11	58.3	42.09 7	70.4
	33.14 - 3	22.2	55.37 -	21.4	41.28	55.8	42.02	74.1
16	33.17	20.3	55.39 7	20.1	41.22	52.0	41.99	71.6
26	33.27	18.4	55.40	18.6	41.22	100	42.01	68.9
36	33.46	16.3	3355.58	16.9	41.28	46.4	42.09	65.7
Mittl. Ort	30.28	12.0	53.67	22.4	41.28	51.3	41.33	70.5
sec 8, tg 8	_	-1.330			1.386	+0.960		10.3

	716) 5.	Aquilae.	717) À.	Aquilae.	718) α Coi	on.austr	720) π Sa	git tar ii.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 ^h 1 ^m	13° 43'	19 ^h 1 ^m	5" 0'	19 ^h 3 ^m	38° 2′	19 ^h 4 ^m	21" 9
Jan. o	23.14	51.0	36.47	59.6	31.51 18	38.4 12	33.91 16	56.6
10	23.26	48.7	36.61	60.7	31.69	37.2	34.07 18	56.6
20	23.41	46.7	36.77	61.7	31 90 25	36.1	34.25 21	56.5
30	23.59 22	44.8	36.96	62.6	32.15 28	35.1 ₁₀	34.46	56.5
Febr. 9	23.81	43.1	37.19	63.3	32.43	34.1	34.70	56.4
19	24.05 26	41.7	37.44 27	63.9	32.75	33.2	34.97 20	56.2
März 1	24.31	40.6 7	37.71 28	04.3	33.09 35	32.3 8	35.26	56.0
11	24.58	39.9	37.99 20	64.5	33.44 28	31.5	35.56	55.0
21	24.87	39.0	38.28 30	64.4	33.82 28	30.8	35.88	55.2
31	25.17	39.8	38.58	64.1	34.20	30.1	36.20	54.7
April 10	25.47 30	40.3	38.89 30	63.5	34.59 38	29.5	36.53	54.1
20	25.77	41.3	39.19 30	62.7	34.97 38	29.1	36.86 33	53.4
30	26.07	42.6	39.49 30	61.7	35·35 ₃₇	20.0	37.19 ₃₁	52.7
Mai 10	26.35 27	44.2 19	39.79 27	60.5	35.72	28.6	37.50	52.0
20	26.62	46.1	40.06	59.2	36.07	$28.5 - \frac{1}{2}$	37.80	51.3
30	26.87	48.2	40.32	57.9	36.40 30	28.7	38.09	50.6
Juni 9	27.09 19	50.4	40.55 20	56.6	36.70 26	29.0 3	38.34	50.1
19	27.28	52.6	40.75	55.2	36.96	29.4 6	38.57	49.6 3
29	27.43	54.8	40.92	54.0	37.17	30.0 8	38.75	49.3
Juli 9	27.54	56.9	41.05	52.8	37.34	30.8	38.90	49.0
19	27.61	59.0 18	41.13	51.7	37.45 6	31.7	39.00 6	48.9
29	27.63	60.8	41.17	50.8	37.51	32.6	39.06	48.9
Aug. 8	27.61 6	62.5	41.17 5	50.1 6	37.51 5	33.6 10	39.06	49.0
18	27.55 10	64.0	41.12	49.5	37.40	34.6	39.02 8	49.1 2
28	27.45	65.1	41.04	49.0	37.36	35.4 8	38.94	49.3
Sept. 7	27.32	66.1	40.03	48.7	37.22 16	36.2	28.82	40.6
17	27.17	66.7	40.70	48.5	37.06	36.0 T	38.69 16	49.8 2
27	27.00 18	67.1 4	40.64 16	48.4	36.86	37.4 5	38.53 17	50.0
Okt. 7	26.82	$67.2 - \frac{1}{2}$	40.48 16	48.5	36.66	37.6 I	38.30 16	50.2
17	26.65	67.0	40.32	48.7	36.45	37.7 —	38.20	50.3
27	26.40	66.4	40.17	49.0	26.27	37.5	28.04	50.4
Nov. 6	26.35	65.6	40.05	49.4 6	36.11	37.I 6	37.91	50.5
16	26.23	64.5	39.95 6	50.0 6	35.99 8	36.5	37.81 6	50.5
26	26.16	63.2 16	39.89	50.6	35.91	35.8 7	37.75 I	50.5
Dez. 6	26.12	61.6	39.87 —	51.4 8	35.88	34.9	37.74 -	50.4
16	26.12	59.8	39.89	52.2	35.91	33.9	37.76	50.4
26	26.17 5	570 19	30.06	53.1 9	36.00	22.8	27.82	50.4
36	3526.27	55.7	40.08	54.2	36.13	31.8	37.96	50.3
Mittl, Ort	24.67	60.1	37.93	49.7	33.26	27.3	35-43	46.0
sec 8, tg 8	1.029	+0.244	1.004	-0.088	1.270	-0.782	1.072	-0.387

Thorday 9	723) 8 D	raconis.	724) 8	Lyrae.	725) w A	quilae.	726) z	Cygni.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
TIES T	19 ^h 12 ^m	67° 30′	19 ^h 13 ^m	37° 58′	19 ^h 13 ^m	11° 25′	19 ^h 15 ^m	53° 11'
Jan. o	28.35	24.7 38	18.95	34.2	,42.45	67.1	3.04	80.8
IO	28.33	20.9 35	19.03	30.8 34	42.56	65.0	3.08 4	77.1 37
20	28.42	17.4 34	19.15	27.8 28	42.70 18	63.1	3.18	73.7_{32}
30	28.62	14.0 31	19.32	25.0 26	42.88	61.4 16	3.35 22	70-5
Febr. 9	28.91 39	10.9 28	19.52	22.4	43.08	59.8	3.57	67.4
19	29.30 46	8 т	19.77 28	20.1	42.2T	58.5	3.85	64.8
März 1	20.76	5.8 23	20.05	18.3	43.56 27	57.4 6	4.18 33	62.7
11	30.28 52	4.0	20.35	16.9 8	43.83 29	56.8	4.54 40	61.0
21	30.85 60	2.0	20.67 32	16.1	44.12 29	56.6	4.94	60.0
31	31.45 62	2.4 -	21.00 33	15.9 —	44.41	56.7	5.35	59.6 4
April 10	22.07	2.6	21.35	16.3	44.71	57.2	5.77	59.9
20	22 67	3.4	21.60 34	17.3	45.0T	58.2	6.19	60.8
30	33.25	4.8	22.02 33	18.7	15.21 30	EO E 13	6.50	62.2
Mai 10	33.78	6.8	22.24 32	20.7	15 60	6тт	6.98 39	64.3
20	34.25	9.3 25	22.64	23.0 23	45.88	62.9	7.33 35	66.8
30	34.66	12.2	27	27	46.14	64.0	7.64	69.6
Juni 9	33	32	22.91 24	25.7 28.7	46.36	64.9 21	20	72.7 31
19	34.99 ₂₄ 35.23 ₁₄	15.4	23.15 19	31.7	46.56	69.2	7.9° 21 8.11	76.1 34
29	35.37	22.3 35	23.34 ₁₅ 23.49 ₁₀	34.9 32	46.73	71.3	8 25 14	79.5
Juli 9	35.4I 4	25.8 35	23.59	38.0	46.85	73.4	8.33	83.0 35
1	0	35	5	30	8	19	2	34
19	35.35 16	29.3	23.64 -	41.0 29	46.93	75·3 18	8.35 -	86.4
29	35.19 25	32.6 33	23.63 5	43.9 26	40.9/	77.1	8.30	89.6
Aug. 8	34.94 33	35.8 29	23.58 10	46.5	46.96	78.8	8.19	92.0
28	34.61 33	38.7 26	23.48	48.9 21	46.92	80.2	8.02	95.3 24
	34.20	41.3	23.33	51.0	46.83	81.3	7.79	97.7
Sept. 7	33.71	43.3	23.15 21	52.6	46.71	82.2	7.52 31	99.7 16
17	33.10	150	22.94 24	53.9	46.57	82.9	7.21	101.3
27	32.60	46.2	22.70 24	54.8	46.41	83.3	0.00	102.4
Okt. 7	32.01 61	46.9	22.46	55.2	46.24	83.4	0.53	103.0
17	31.40	47.0 -	22.22	55.1	46.07	83.3	0.18	103.1
27	20 8T	166	27.08	54.6	45.01	82.9	5.84	102.6
Nov. 6	- 40	156	21.77	53.6	45.76	82.T	5.5T 33	101.7
16	29.74	44.1	21.58	52.2	45.65	81.2	5.23	100.2
26	29.29	42 T	21.43	50.4	15.56	80.0	4.98 19	98.2
Dez. 6	28.91	39.7	21.32	48.1	45.52	1/0.5	4.79	95.7
16	28.62	26.8	21.27	156	45.52	76.0	4.66	02.0
26	28.44	33.6	21.26	42.8	45.55	Mr T	150	80.8
36		30.2	21.29	39.9	45.63	73.3	4.59	86.6
Mittl. Ort	32.29	30.5	20.88	41.4	43.97	76.0	5.57	87.0
seco, tg 8	2.614	+2.415	1.269	+0.780		- 0.202		+ 1.337

. Al (16)	729) τ D	raconis.	728) α Sagittarii.		730) & Aquilae.		732) β Cygni.	
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
- 1	19" 17"	73° 11'	19 ^h 17 ^m	40° 46′	19 ^h 21 ^m	2° 56′	19" 27"	27° 46
Jan. o	8.77	34.4 38	49.84	61.5	5.26	16.6	11.05 6	27.4
10	8.67	30.6 35	50.01	00.0	³ 5.37 ₁₄	15.0	II.II	24.8
20	8.74	27.1	50.21	58.8 13	5.51	13.6	11.23 16	22.0
30	8.94 34	23.8 33	50.45 28	57.5	5.68	12.4	11.39 18	19.5
Febr. 9	9.28 46	20.6	50.73	56.2	5.88	11.3	11.57	17.2
19	9.74 57	17.8	51.04 34	55.0	6.11	10.4 7	11.79 25	15.2
März 1	10.31 66	15.4 18	51.38 36	53.9 10	6.36	9.7	12.04 28	13.6
II	10.97 72	13.6	51.74 37	52.9 10	6.63 28	9.3	12.32 29	12.5
21	11.60	12.3 6	52.11 40	51.9 8	6.91 29	9.2 =	12.61 31	11.8
31	12.46 77	11.7	52.51	51.1	7.20	9.5 6	12.92	11.7 -
April 10	T2 24	11.8	52.90	50.4	7.50	10.1	12.24	12.1
20	14.00	12.5	53.31	49.8	7.81	TTO 9	13.56 32	13.0
30	TA 74 /4	12.8	53.70	49.4	8.11	12.2	13.87 31	T12
Mai 10	TE 42	15.7	£4.00 39	40.1	8.40	126 14	14.18	16.T
20	16.02	18.1	54.47	49.0	8.69	15.2	14.47	18.3
30	16.53	20.0	54.82	49.1	8.95	18	14.74	20.8
Juni 9	16.02	24.0	EE TA 3"	49.5	0.10	18.8	14.08 24	23.4
19	17.21	27.4	55.42	50.0	0.40	20 5 17	15.10	26.1
29	17.37	20 8 34	55.65	507	9.40 18	22 2	15.26	20.0
Juli 9	17.40 3	34.4	55.84	51.5	9.71	23.9	15.48	31.8
	10	35	13	IO	10	10	8	2
19	17.30	37.9 34	55.97 8	52.5 m	9.8r 9.86 5	25.5 14	15.56	34.5 2
Aug. 8	35	41.3 32	56.05	53.6		26.9 12 28.1	15.59 2	37.1
18	16.71 46	44.5 29	56.06	54.7	9.87 -3	11	15.57 6	39.5 2
28	16.25 15.68 ⁵⁷	47.4 26	56.02	55.9 10	9.84 7	29.2 8	15.51 10	41.6
	15.08 66	50.0	55.93	56.9	9.77	30.0	15.41	43.5
Sept. 7	15.02 73	52.2	55.80 17	57.9 8	9.66	30.7	15.27 17	45.0
17	14.29 78	53.9	55.63 20	58.7	9.53 15	31.1	15.10 19	46.2
27	13.51 80	55.2 8	55.43 21	59.4	9.38 16	31.4 0	14.91 20	47.0
Okt. 7	12.71 83	56.0	55.22 22	59.8	9.22 16	31.4	14.71 21	47.4
17	11.88	$56.3 - \frac{1}{3}$	55.00	59.9	9.06	31.3	14.50	47-4
27	11.07	56.0 8	54.80	59.8	8 0.1	31.0 6	14.31 18	47.0
Nov. 6	10.30	55.2	54.63	59.4	8.77	20.4	14.13 16	46.2
16	0 577 /3	53.8	54.40	58.9 8	8.66	20.7	13.07	45.1 1
26	8.02	51.0	54.39	58.T	8.50	28.7	12.85	12.5
Dez. 6	8.38	49.6	54.35	57.1	8.55	27.7	13.76	41.6
16	7.04	46.8	5426	56.0	8.55	26.5	12.72	20.5
2 6	760 31	43.7	54.42	54.8	8.58	25.2	13.72	27. T
36	7.45	43.7 34	54.54	53.5	8.67	23.8	13.76	34.6
Mittl. Ort	13.98	20.4	51.61	49.7	6.72	25.9	12.75	34.7
MILLI. Ort	13.90	3 9·4	34.01	47.1	0./4	42.A	14./)	24.1

	733) ı	Cygni.	736) h Sa	gittarii.	738) 🕽	Cygni.	741) 7 A	quilae.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 ^h 27 ^m	51° 32'	19 ^h 31 ^m	25° 4'	19" 34"	50° 0′	19 ^h 42 ^m	10° 23
Jan. o	28.32	32.8	23.37	46.6	4.12	63.8	5.93 8	53.8
10	28.34	20.5	23.48	46.3 3	4.13	60.6 32	6.01	52.0
20	28.43	25.0	23.65	45.9 5	4.22	57.0	0.13	50.1
30	28.58	22.7	23.85	45.4	4.36	53.8	6.27 18	48.5
Febr. 9	28.79	19.7	24.07	45.0	4.55	50.8 27	6.45	47.0
19	29.04 31	17.0	24.32 27	44.5 6	4.80	48.T 22	6.66	45.8
März 1	29.35	14.8	24.59 30	43.9 7	5.00	45.9 17	6.89 25	44.8
11	29.09	13.1	24.89	43.2	5.42 36	44.2	7.14 27	44.2
21	30.00	12.0	25.21 32	42.5 7	5.78 38	43.1 6	7.41 29	44.0
31	30.46	11.5	25.53	41.8	6.16	42.5	7.70	44.1
April 10	30.87	11.6	25.86	40.9 8	6.56	42.6	8.00	44.6
20	31.27	12.4	26.20 34	40.1 8	6.96	43.3 7	8.30 30	45.5
30	31.68 41	TOX	26.55 35	39.3 8	7.35 39	44.7	8.61 30	46.8
Mai 10	34.00	15.7	26.88 33	38.5 8	7.73 35	46.5	8.91 29	48.3
20	32.41 35	18.1	27.21	37.7	8.08	48.9	9.20	50.2
30	32.73	20.0	27.51	37.0	8.40	51.6	9.47	52.1
Juni 9	22.01	23.0	27.80	36.5	8.68	54.6	0.72	54.2
19	22.22	27.2 33	28.05 25	36.1	8.91	57.0 33	0.04	56.4
29	33.39 10	20.7	28.27	35.8	9.08 17	61.3	10.13 16	58.6
Juli 9	33.49	34.1	28.45	35.7	9.19	64.7	10.29	60.7
19	33.54	37.5	28.58	0	9.24	68.1	10.39	62.7
29	22 57 3	108 33	28.66	35·7 ₂ 35·9 ₂	0.22	71.4 33	10.46	64.5
Aug. 8	33.43	128	28.60 3	36.2	0.17	74.5	10.48	66.2
18	33.28	46.6	28.67 6	36.6	0.04	77.4	10.46	67.7
28	33.08	49.1	28.61 6	37.0 4	8.86	79.9	10.39	68.9
Sept. 7	32.84	22	28.51	4	8.63 26	82.0	10.29	69.9
Sept. 7	32.55	51.3	28.38	37.4 5		83.8	10.17	70.6
27	32.24	54.2	28.22	37.9 38.3	8.37 30	85 T	10.02	71.1
Okt. 7	31.91 33	54.0	28.06	38.6	7.76 31	85.9	9.86	71.4
17	31.58 33	55.1	27.89	38.8 2	7.44 32	86.2 3	9.69	71.3
	32	2	16	2	31	2	16	
Nov. 6	31.26 31	54.9 8	27.73	39.0	7.13	86.0	9.53 15	71.0
Nov. 6	30.95 28		27.58	39.1	6.83 26	85.3	9.38	70.5
26	30.67 24	52.7 18	27.47 8	39.0 ₁ 38.9 ₂	6.57	84.0	9.25 9	68.6
Dez. 6	30.43 19	50.9 48.6 ²³	27.39 27.35	38.7	6.34 19	82.3 80.1	9.16 6	67.3
	14	26	0	3	14	26	2	
16	30.10 8	46.0	27.35	38.4	6.01	77.5 29	9.08 -	65.9
2 6	30.02	43.0	27.39	2 X T	5.93 2	74.6	9.09 5	64.3
36	30.00	39.8	27.48	37.8	5.91	71.5	9.14	62.6
Mittl. Ort	30.78	38.2	24.86	35.2	6.50	68.8	7.41	62.0
sec 8, tg 8	1,608	+1.259	1.104	-0.468	1	+1.193		+0.18

	01.	2121732	KOLMI	INAI	ION D	ESTOLS 1.		941
	742) δ	Cygni.	743) 8 S	agittae.	745) α Λ	quilae*).	747) ε Di	raconis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.
	19 ^h 42 ^m	44° 54′	19 ^h 43 ^m	18° 18′	19 ^h 46 ^m	8° 37'	19 ^h 48 ^m	70° 2'
Jan. 0 10 20 30 Febr. 9	13.21 2 13.23 8 13.31 12 13.43 18	59.5 31 56.4 34 53.0 31 49.9 28 47.1	28,95 6 29.01 11 29.12 14 29.26 18 29.44	60.9 21 58.8 24 56.4 20 54.4 19 52.5 6	30.85 30.92 31.04 31.19 31.37	67.8 16 66.2 18 64.4 15 62.9 13	23.93 23.78 15 23.76 $\frac{2}{11}$ 23.87 24.09	44.5 41.2 38 37.4 34.0 30.7
März 1 11 21 31	13.84 26 14.10 30 14.40 33 14.73 35	44.5 22 42.3 17 40.6 11 39.5 5	29.64 29.87 26 30.13 30.40 30.69	50.9 49.6 48.7 48.2 48.2	31.57 23 31.80 25 32.05 28 32.33 28 32.61	60.4 8 59.6 4 59.2 3 58.9 2	24.43 24.86 25.38 25.96 26.60 34 24.86 52 25.96 64	27.7 26 25.1 21 23.0 16 21.4 9
April 10 20 Mai 10 20	15.45 38 15.83 37 16.20 36 16.56 33	39.1 7 39.8 12 41.0 18 42.8 23	30.99 31 31.30 31 31.61 30 31.91 30 32.21	48.7 8 49.5 13 50.8 16 52.4 20 54.4	30 32.91 33.21 33.52 33.82 33.82 34.11	59.7 60.6 61.9 63.4 65.2	27.27 68 27.95 66 28.61 63 29.24 58 29.82	20.2 $\frac{3}{4}$ 20.6 10 21.6 15 23.1 21 25.2
Juni 9 19 29 Juli 9	17.20 28 17.48 23 17.71 18 17.89 13	47.7 50.7 53.8 57.1	32.48 ₂₆ 32.74 ₂₂ 32.96 ₁₈ 33.14 ₁₅	56.6 58.9 61.4 63.9 25	34.39 26 34.65 23 34.88 19 35.07 15	67.I 20 69.I 21 71.2 21 73.3 21	30.34 43 30.77 34 31.11 24 31.35 13	27.9 30.8 34.1 37.6 35
Aug. 8 18 28	18.02 8 18.10 18.12 2 18.08 10 17.98 14	60.5 33 63.8 32 67.0 30 70.0 28 72.8 25	33·29 10 33·39 6 33·45 1 33·46 3 33·43 7 33·36	66.4 68.8 71.0 21 73.1 18 74.9 16 76.5	35·22 11 35·33 7 35·40 3 35·43 2 35·41 6 35·35 -	75·4 77·3 18 79.1 17 80.8 15 82·3 11	31.48 ² 31.50 ⁹ 31.41 ²⁰ 31.21 ³⁰ 30.91 ³⁹ 30.52 ³⁹	54.0
Sept. 7	17.65 23 17.42 25	77.4 17 79.1 13	33.25 ₁₄ 33.11 ₁₆	77.8 10 78.8 7	35.25 12 35.13 15	84.3 85.0 5	30.04 30.04 55 29.49 60 28.89	60.4 22 62.6
Okt. 7	17.17 16.90 28 16.62	$ \begin{array}{c} 80.4 \\ 81.3 \\ \hline 81.6 \\ \hline \end{array} $	32.95 32.78 18 32.60	79.5 79.9 80.0 - 3	34.98 15 34.83 17 34.66 16	85.5 85.7 85.6	28.25 66 27.59 68	66.3
Nov. 6 16 26	20	81.5 80.8 79.7 16	32.43 16 32.27 14 32.13 11	79.7 6 79.1 9 78.2 13	34.50 14 34.36 12 34.24 10	85.4 6 84.8 7 84.1 10	26.91 66 26.25 62 25.63 56	65.2
Dez. 6 16 26 36	15.65 16 15.49 12 15.37 6 15.31 1	78.1 76.0 24 73.6 28 70.8 30	32.02 31.95 4 31.91 31.91 31.95	71.8	34.14 6 34.08 2 34.06 2 34.08 5	81.9 80.6 70.1	25.07 50 24.57 41 24.16 31 23.85 21 23.64	59·3 ₂₉
Mittl, Ort	15.36	64.3	30.50	68.3	32.31	76.3	28.42	46.8
sec 8, tg 8		+0.997		+0.331	-	+0.152		+2.754
*) I	de jährliche	Parallax	e ist bereit	s angebra	icht.			

	748) ε 1	Pavonis.	749) ß A	Aquilae.	750) ψ	Cygni.	751) 9 Sagittarii.	
1913	AR.	Dekl.	AR,	Dekl.	AR.	Dekl.	AR.	Dekl.
	19" 50"	73° 8′	19 ^h 51 ^m	6° 11′	19 ^h 53 ^m	52° 12′	19 ^h 54 ^m	35° 30
Jan. o	29.02	43.5 30	0.95	11.0	20.36	23.9 32	3.00	57.4
10	29.14	40.5 34	1.02	9.5 16	$\frac{20.33}{5}$	20.7 35	3.10	56.4
20	29.43	37.1 30	16 I.14 14	7.9	20.38	17.2 33	16 3.25 18	55.2
30	29.83	34.1	1.28	6.5	20.49	13.9 30	3.43 ,,	54.0
Febr. 9	30.35 62	31.2	1.45	5.3	20.66	10.9 28	3.66	52.8
19	30.07	28.5 25	1.65	4.2 8	20.88	8.1	3.91 28	51.6
März 1	31.68	26.0 23	1.87 25	3.4	21.16	5.7 20	4.19 31	50.4
11	32.47 86	23.7	2.12 27	3.0 4	21.48 36	3.7	4.50	49.2
21	33.33 90	21.9 16	2.39 28	2.8 -	21.84 20	2.4 8	4.84 34	48.0
31	34.23	20.3	2.67	3.0	22.23	1.6	5.19 36	46.9
April 10	35.15	TO 2	2.96	3.6	22.64	1.5	5.55	45.7
20	36.10 95	18.4	3.27 31	4.5	23.05	2.0	r 02 3/	44.7
30	37.04 94	18.1	3.57	5.8	23.46	2.1	6 30	43.8
Mai 10	27.07 93	18.2	3.88	7.2	22 87 41	4.8	6.68	43.1
20	38.86	18.8	4.17	8.9 17	24.25	7.0	7.05 37	42.5
30	39.69	19.6	28	10.8	24.60	9.6	35	120
т •	/0	14	4.45 26	12.8	30	12.6	7.40 32	42.0
Juni 9	40.45 68 41.13	21.0	4.71	14.8	24.90 26 25.16 21	15.8 32	7.72 8.02	41.8
29	41.69 56	24.6	4.94 20	16.7	~.	19.2 34	8.28	42.0
Juli 9	42.14 45	26.9 23	5.14 5.30	18.6	25.37 25.51	22.7 35	8.50	42.3
	31	25	5.50	18	43.31	35	16	
19	42.45 18	29.4 25	5.43 7	20.4	25.59	26.2	8.66	42.9
29	42.63	31.9	5.50	22. I	25.60 -	29.0	8.77 6	43.6
Aug. 8	42.00	34.4 25	5.53	23.5	25.55 II	32.8	8.83	44.5
18 28	42.55	36.9 23	5.52	24.8	25.44 17	35.8 28	8.84 -6	45.4
	42.31	39.2	5.47	25.9	25.27	38.6	8.78	46.4
Sept. 7	41.95	41.3 18	5.38	26.8	25.05 27	41.0	8.69 14	47.3
17	41.48 56	43.1	5.27	27.4	24.78	43.0	8.55	48.2
27	40.92 60	44.5	5.13 16	27.8	24.48	44.6	8.39 18	49.0
Okt. 7	40.32 64	45.4	4.97 16	27.9	24.10	45.6	8.21	49.6
17	39.68	45.8 -	4.81	27.9	23.83	46.2	8.02	50.0
27	39.04 61	45.7	4.65	27.6	23.50	46.3 -	7.83	50.2
Nov. 6	28.42	45.0	4.51	27.1 5	22.18	45.8 5	7.65	50.2
16	37.80	43.8	4.30	26.4	22.89 26	44.8	7.51	50.0
26	37·43 ₃₄	42.1 21	4.29 6	25.5 9	22.63	43.3 20	7.40	10.6
Dez. 6	37.09	40.0	4.23	24.3	22.41	41.3	7.33	49.0
16	36.86	37.5	4.20	23.1	22.23	28 0	3	18.2
26	26 77 -	24.8	4.21	21.7	22 72	36.T	7.00	172
36	36.82 5	31.8	4.26	20.3	22.06	33.I ³⁰	7.38	46.2
	_	3		,		33	, ,	
Mittl. Ort	32.85	28.9	2.39	19.5	22.86	27.2	4.53	44.5

-	752) γ S	agittae.	754) 8 I	Pavonis.	756) 8	Aquilae.	757) o¹ see	q. Cygni.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 ^h 54 ^m	19° 14′	20 ^h 0 ^m	66° 24 '	20h 6m	1° 4'	20 ^h 10 ^m	46° 2 8′
Jan. o	51.72	71.9	9.36	33.0 26	47.63 6	58.0	51.32 2	34.5 29
10	51.77	69.7	9.46	30.4 31	47.69	59.0	51.30	31.6
20	51.87	67.4 21	9.68	27.3 28	47.79	60.1	2051.33	28.5
30	51.99	65.3 19	9.97 38	24.5 27	47.92 16	01.0	51.42	25.1
Febr. 9	52.16	63.4	10.35	21.8	48.08	61.8	51.56	22.2
19	52.35 22	61.8	10.80	19.3	48.27	62.4	51.76	19.5
März 1	52.57 25	60.4	11.32 58	16.9	48.49	62.8	51.99 28	17.1
11	52.82	59.5	11.90 62	14.7 20	48.73 26	62.9 -	52.27 32	15.2
21	53.09 28	59.0	12.53 66	12.7 16	48.99 28	62.8	52.59 34	13.9 8
31	53.37	58.9 -	13.19	11.1	49.27	62.4	52.93	13.1
April 10	53.67	59.3 8	13.88	9.8	49.56	61.6	53.30 28	12.9 -
20	53.98 31	60.1	14.58	8.9	49.80	60.6	53.08 38	13.3
30	54.29 31	01.4 16	15.29 70	8.4	50.17	59.4 13	54.00 38	14.3 16
Mai 10	54.60 30	63.0 19	15.99 68	8.2 -	50.48 30	58.1 16	54.44 37	15.9 20
20	54.90	64.9	16.67	8.5 6	50.78 30	56.5	54.81 34	17.9
30	55.18 26	67.1 ₂₄	17.31 60	9.1	51.08 27	54.7	55.15 30	20.4 28
Juni 9	55.44 23	69.5	17.91	10.1	51.35 25	53.0	55.45 27	23.2
19	55.67	72.0 26	18.44	11.4	51.60	51.3	55.72 22	26.3
T 1: 29	55.87 16	74.6	18.90 38	13.1	51.81 18	49.6	55.94 17	29.0
Juli 9	56.03	77.1	19.28	15.0	51.99	48.0	56.11	33.0
19	56.14	79.6	19.56	17.2	52.13	46.5	56.22	36.4
29	56.21	81.9 21	19.73	19.5	52.23	45.2	56.27	39.8 34
Aug. 8	56.23	84.0	19.80 -	21.8	52.28	44.I 10	55.27	43.0
18	56.21 6	86.0	19.77	24.2	52.29	43.1 8	56.20 12	40.0
28	56.15	87.7	19.64	26.4	52.26	42.3	56.08	48.7
Sept. 7	56.05 14	89.1	19.41 29	28.5 18	52.19	41.7	55.92 21	51.1 21
17	55.91	90.2	19.12 38	30.3	52.08	41.3	55.71 24	53.2 16
27	55.76	91.0	18.74	31.7 10	51.96	41.1	55.47 26	54.8
Okt. 7	55.59 18	91.4	18.32	32.7 6	51.81	41.1	55.21 28	56.0
17	55.41	91.6	17.89 44	33.3	51.66	41.2	54.93	50.7
27	55.24 16	91.4	17.45	33.4	51.51	41.4	54.66	57.0 -
Nov. 6	55.08	90.9 5	17.03	32.9 9	51.36	41.8 6	54-39 26	56.7 8
16	54.93	90.0	10.05	32.0	51.24 9	42.4 7	54.13 23	55.9 13
26	54.82	88.8	10.34	30.7	51.15	43.1 7	53.90 10	54.6
Dez. 6	54.73	87.4	16.11	28.9	51.08	43.8	53.71	52.8
16	54.68	85.7 20	15.96	26.7	51.05	44.7 10	53.56 10	50.6
26	54.68	83.7 20	15.90 -	24.3 26	51.05	45.7 10	53.46	48.1 25
36	54.71	81.7	15.95	21.7	51.09	46.7	53.41	45.3
Mittl. Ort	53.27	78.7	12.10	18.0	48.99	48.9	53.52	37.0
sec o, tg o		1-0.349	2.498	-2.289		0.019	1.452	+1.053

AR. June June AR. June		759) ×	Cephei.	760) 24 V	ulpecul.	76 1) α ² Ca	pri c orni.	764) a P.	avonis.
Jan. 0	1913	AR.		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
The color of the		20 ^h 11 ^m	77° 26′	20" 13"	24° 23′	20 ^h 13 ^m	12° 48′	20 ^h 18 ^m	57° °
10	Jan. o		59.9 31	2.12	- 22			44.41 6	68.2
20	i	12.OI	50.8	. 7	. 23		05.0	12	66.0
Pebr. 9 42.09 49.8 37 46.4 31 46.4 31 46.4 31 44.50 82 38.1 88 21 44.50 82 36.3 188 21 45.32 92 35.0 7 36.2 18 46.24 98 35.0 7 36.2 18 48.83 10 50.21 90 38.0 38.0 32 49.24 31 50.21 90 38.0 38.0 39.3 31 49.0 20 48.23 101 35.0 20 51.11 88 31 50.21 90 38.0 38.0 39.3 31 49.0 7 7 41.70 31 45.25 38.1 38.0 29 53.65 52.4 49.3 50.8 14.70 30 60.1 10 47.22 101 34.3 0 49.24 31 50.21 90 38.0 38.0 30 51.92 69.3 38.0 39.3 49.0 7 49.00 53.16 59.30 59.76 25 59.1 27 50.50 59.3 59.20 60.60 79.4 59.20 59.3 59.20 60.60 79.3 59.20 60.60 79.3 79.20 60.60 79.3 79.20 60.60 79.3 79.20 60.60 79.3 79.20 79.20 79			τ 53·5 ₂₇	2.21	59.1	14	05.9		63.6
März I			49.8	2.32		17	C		60.9
Mărz I	renr. 9			17	54.4	19		45.07	58.5
März 1 43,880 70 40,52 24 2,84 24 41,03 13,29 65,8 3 45,74 41,53 33,1 42,03 38,1 18 30,8 24 49,8 8 13,35,4 26 65,5 66,5 3 46,15 45,4 46,15 45,4 46,15 45,4 46,15 45,4 46,15 45,4 46,15 45,4 46,15 45,4 46,15 46,15 45,4 46,15 46,15 45,4 46,15 46,15 46,15 46,15 46,15 46,15 46,15 46,15 47,08 46,15 46,15 47,08 48,23 47,08 48,23 47,08 47,08 48,23 47,08 48,23 48,23 49,24 49,71 11,47,09 36,62 11,47,08 48,45 33,49 49,70 11,47,09 36,62 11,48 49,70 11,47,08 49,70 41,49 41,49 41,49 41,49 41,49 41,49 41,49 41,49		43.25	12.2	2.63		13.07	2	15 28	56.0
11	März 1	43.80	40.5	2.84	51.0	13.29 25	05.8	45.74	53.7
21		44.50 8	38.1	3.08 26		13.54 26	05.5 6	46.15	51.6
April 10			1-1		49.0	1 29	0	40.00	49.6
April 10		40.24	35.0	3.03	48.8			47.08	47.8
20	April 10	47.22	21.2	2.03	40.0	14.39	63.1	47.58	46.2
Mai 10 50.21 97 35.0 12 4.56 32 50.8 16 15.02 33 60.8 13 49.17 53 4 4.86 4 33 4.87 50.2 1	20	18 22	34.3	4.24	49.7	14.70	62.0	40.11	44.9
Mith Ort		49.24	35.0	4.50	50.8 16	15.02	60.8	40.04	44.0
20 51.11 81 38.0 23 51.92 69 40.3 27 40.0 30 51.92 69 40.3 27 52.61 55 46.0 30 40.4 34 60.22 17 64.5 28 66.52 43.0 35 66.62 43.73 90 70.8 40.2 17 47.94 168 80.6 17 47.94 168 80.6 17 47.94 168 80.6 16 44.72 90 80.9 11 26 44.72 90 80.9 11 26 44.72 90 80.9 11 26 44.72 90 80.9 11 26 44.72 90 80.9 17 26 44.82 40.92 49.8 16 50.0 37 49.82 16 50.0 37 49.82 16 50.0 37 49.82 16 50.0 30 40.92 49.82 40.82 4	Mai 10	50.2 T	30.2	4.00	52.4 20	15.35 21	59.5	49.17	43.3
Juni 9 52.61 69 40.3 27 5.76 28 59.1 15.97 29 56.8 13 50.20 48 4 19 53.16 39 40.4 35 6.61 21 64.5 28 16.52 24 11 6.76 19 52.1 8 51.82 31 49.8 19 53.75 27 66.2 37 66.2 38 6.37 36 6.62 37 70.2 27 750.6 38 53.48 48 53.45 57 70.2 29 53.75 70.2 29 53.75 28 52.48 70.2 29 53.75 28 52.48 70.2 29 53.75 28 52.48 70.2 26 17.11 15 51.3 7 52.25 9 52.34 18 53.05 57 70.2 26 77.3 20 77.2 20 77.5 0.6 4 52.35 17 70.2 20 77.2 20	20	51.11	38.0	5.19	54.4	15.00	58.1	49.70	43.0
Juni 9 52.61 59 43.0 39 59.61 6.01 21 66.0 27 66.01 22 66.01 22 66.01 22 7 64.0 34 51.1 38 51.1 38 5	30	ET 02	40.3	F 18	56.6	15.07	56.8	50.20	43.I
Juli 9 53.16 39 46.0 34 49.4 35 60.2 21 60.2 21 60.5 22 4 60.5 28 60.5 36 71 56.6 36 60.2 35 6	Juni 9	52.6T	. 43.0	5.76	50.I	Th 2h '	55.5	50.08	43.5
Juli 9 53.55 24 49.4 35 6.22 17 64.5 28 16.76 19 52.1 8 51.82 33 4 51.82 33 51.82	19	53.10	40.0	6.01	01.8	16.52	E12		44.3
Juli 9 53.79 52.9 37 56.6 39 6.39 13 67.3 27 70.0 26 77.11 10 53.86 71 60.2 36 660 47.2.6 25 70.0 26 77.3 20		52.55	, 49.4	6.22	64.5 28	16.76	53.1	51.49	45.4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Juli 9	53.79	52.9	6.39	67.3	16.95	52.I	51.82	46.7
Aug. 8	19	53.86	- 166	6 12	700	17 11	51.3	F2 OF	48.2
Aug. 8 53.48 $\frac{4}{43}$ 63.7 $\frac{35}{33}$ 6.64 $\frac{1}{4}$ 75.1 $\frac{1}{22}$ 17.29 $\frac{7}{4}$ 50.2 $\frac{4}{4}$ $\frac{52.34}{49.8}$ $\frac{9}{15}$ $\frac{52.34}{6.57}$ $\frac{9}{70.2}$ $\frac{17}{29}$ $\frac{17.29}{6.57}$ $\frac{17}{70.2}$ $\frac{17}{3}$ $\frac{17.29}{3}$ $\frac{17.29}{49.8}$ $\frac{1}{1}$ $\frac{52.36}{6}$ $\frac{2}{6}$ $$	-	FOME	60.2	6.60	72.6		50.6	52.25	50.1
18	Aug. 8	53.48	63.7	0.04	75.1	17.29	50.2	52.24	52.0
Sept. 7 51.76 83 73.1 25 6.48 13 81.0 17 17.22 10 49.6 1 52.17 19 50.93 93 75.6 22 77.8 16 6.9 17 49.90 106 79.4 12 80.6 17 47.94 108 80.6 17 47.94 108 80.6 17 5.48 16 44.72 99 81.4 15 5.48 16 50.2 18 84.2 18 16.44 12 1	18	52.05	07.0	6.62	77.2	17.31	49.8	-2 -6	54.0
Sept. 7 51.76 83 73.1 25 6.48 13 81.0 14 17.12 10 49.6 1 52.17 19 5 50.93 93 77.8 16 6.35 16 83.5 7 7 17.00 10.0 10.6 79.4 12 5.84 16 84.2 7 16.55 14 50.4 3 50.15 10.70 10.0 10.0 10.0 10.0 10.0 10.0 10.	28	52.48	70.2	6.57	79.3	1 17 28	40.7	52.30	56.0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Sept. 7	r + 776	72.T		810	17 22	40.6	52.17	57.9
Okt. $\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	50.03	75.6	6 25 13	82.4	17 12	40.7	51.98	50.5
Okt. 7 $49.00 {}_{10}$	27	50.00	73 77 8 22	6.19	83.5	17.00	10.0	51.74	61.0
Nov. 6 $\begin{array}{cccccccccccccccccccccccccccccccccccc$	()1.	40.00	70.4	0.02	84.2	1 10.85	50.I	51.45	02.I
Nov. $\stackrel{27}{6}$ $\stackrel{46.86}{45.77}$ $\stackrel{105}{105}$ $\stackrel{81.3}{81.4}$ $\stackrel{1}{\stackrel{5}{5}}$ $\stackrel{5.65}{5}$ $\stackrel{17}{105}$ $\stackrel{84.5}{105}$ $\stackrel{4}{105}$ $\stackrel{16}{105}$ $\stackrel{11}{105}$	17	47.94	80.6	5.84	84.5	16.70	50.4	51.15	02.0
Nov. 6 $\begin{array}{cccccccccccccccccccccccccccccccccccc$	27	46.86	8r.2	5.65	84.5	16.55	50.7	50.84	600 -
Dez. $\begin{array}{cccccccccccccccccccccccccccccccccccc$		15.77	81.4	F 48 1/	84 7 4	16.41	SLT 4	50.55	62.0
Dez. $\begin{array}{cccccccccccccccccccccccccccccccccccc$		44.72	80.0	5.32	83.3	16.20	51.4	50.28	62.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_		79.8	5 10	82.2	16.10	51.8	50.05	61.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Dez. 6	42.03	10.4	5.08	80.7	16.12	52.1	49.87	60.3
20 41.41 49 73.0 29 4.98 74.8 22 16.14 4 53.1 3 49.71 1 5 6 6 6 74.8 22 16.14 4 53.1 3 49.72 1 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	16			5.01	70.0	1 /	52.5	40.75	58.6
36 40.92 49 70.7 4.98 74.8 16.14 53.1 49.72 5		41.41	73.6 25	4.08	77.0	16.10	52.8	40.71	56.7
		40.92	70.7	4.98	74.8				54.5
	Mittl. Ort	50.33	59.5	3.72	68.9	13.73	54.6	46.34	52.6
sec 0, tg 8 4.601 4.491 1.098 +0.454 1.025 -0.227 1.837 -	seco, tg 8	4.601							-1.54

	765) y	Cygni.	767) 8	Cephei.	768) ε I	elphini.	769) a	Indi.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	20" 19"	39° 58′	20 ^h 28 ^m	62° 41'	20" 29 ^m	11° 0′	20" 31"	47° 35′
Jan. o	4.38	37.0 28	4.13	65.8	2.01	18.1	25.57	59.7 18
10	4.37	34.2 29	3.98 6	02.0	2.03 6	16.6	25.61 4	57.9
20	4.40 3	31.3	3.92 - 3	59.5 33	2.09	15.0	25.71 17	56.0 22
30	22 4.49 13	28.2	3.95	55.9	25 2.20 11	13.3	25.88 20	53.8
Febr. 9	4.62	25.5	4.06	52.6 33	2.33	11.8	26.08	51.7
19	4.70	23.0	1.26	40.5	2.40	10.6	26.33	40.7
März I	5 OT	208	4.54	46.8	2.60	9.7	26.61	47.6
II	5 27 20	10.0	480 33	44.4	2.91	0.0	26.93 32	45.6
21	5.55	178 12	F 20 41	12.5	2.15	$8.7 - \frac{3}{}$	27.20	127
31	5.87 32	17.0	5.76	41.3	3.42	8.8	27.68 39	41.0
April 10	6.20 33	1	6.25	. 7	28	5	28.09	16
20	35	16.9 5	6.78 53	40.6	3.70 4.00	9.3 8	28.52 43	38.9
	6.55 36	17.4 10		7	34	IO.I	28.96 44	- 14
Mai 10	6.91 7.26 35	. 15	7.31 52 7.83 52	41.3	4.31 31 4.62	11.3 16	44	37.6 9
	7.61 35	19.9 20	5()	42.5 18	40	12.9	29.40	36.0
20	7.01	21.9	8.33	44.3	4.92 30	14.6	43	4
30	7.94 20	24.3 27	8.79	46.6	5.22 29	16.6	30.27	35.6
Juni 9	8.23	27.0	9.21 36	49.3	5.51 25	18.8	30.68	35.5 2
19	8.50	30.0 31	9.57 20	52.4	5.76	21.0	31.05 34	35.7
29	8.72 18	33.1 33	9.86	55.8 35	5.99 19	23.3	31.39 29	30.2
Juli 9	8.90	30.4	10.07	59.3	6.18	25.5	31.68	37.1
19	9.03	39.7	10.21	62.0	6.33	27.7	31.92	38.I
29	0.10	42.0	10.25 -	66.6 37	6.44	20.7	22.00	20.4
Aug. 8	9.12	45.0	10.22	70.1 35	6.50	31.5	32.20	100
18	0.08 4	488 29	10.10	73.6 35	6.52	33.2	32.21 4	42.5
28	9.00 8	51.4	9.91	76.8 32	6.50	34.6	32.22	44.0
Sept. 7	8.87	23	27	29	6.44	12	8	16
		53.7	9.64	79.7 ₂₆ 82.3	6.34	35.8 36.8	32.14	45.6
17	8.70 20	55.6 16	9.32 ₃₈ 8.94	844	6.22	/	32.00 18	47.1 13
Okt. 7	8.28	57.2 58.3	8.53	86.2	6.08	37.5	31.62 20	11
17	8.05	59.0	8.08 45	87.4	5.92	37.9 38.1 =	31.39 23	49.5 8
	24	39.0	46	7	3.94	1	31.39	50.3
27	7.81	59.3 -	7.62	88.1	5.77 16	38.0	31.15 23	50.8
Nov. 6	7.58	59.0	7.17	88.2	5.61	37.7 6	30.92	50.9 -
16	7.36 19	58.3	0.72	87.8	5.48	37.1	30.71	50.7 5
26	7.17 16	57.1 16	6.31 37	86.8	5.36	36.2	30.54 14	50.2 9
Dez. 6	7.01	55.5	5.94	85.3	5.27	35.1	30.40	49.3
16	6.80	52.5	5.62 36	83.2	5.22	33.0	30.31	48.T
26	6.80	STI	5.36 18	80.7 25	5.TO = 3	22.5	20.27	46.7
36	6.77	48.5 26	5.18	77.9	5.20	31.0	30.28	45.0
Mittl, Ort	6.33	39.7	7.44	65.1	3.40	24.8	27.11	44.2
sec 8, tg 8		+0.838		+1.937	1.019	+0.194	1.483	-1.095

1/4	77°) 73 D	raconis.	771) ß D	elphini.	773) v Ca	pricorni.	774) a De	elphini.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
12111	20 ^h 32 ^w	74° 38′	20h 33m	14" 17	20 ^h 35 ^m	18° 26′	20 ^h 35 ^m	15° 35′
Jan. o	34.39 36	86.0	26.74	24.7	4.69	56.0	34.40	70.5 18
10	34.03	83.0	26.76	23.0	4.74 ,	55.9 1	34.42	68.7 18
20	33.81 6	79.0 26	26.82	21.2	4.81	55.8	34.47	66.9
Febr. 9	33.75 10	76.2 34	26.92	19.3 16	4.93	55.5	34.56	65.0
rebr. 9	33.85	72.8 34 32	27.04	17.7	5.08	55.2	34.68	63.3
19	34.10	69.6	27.20	16.4	5.26	54.7 6	34.84	61.9 12
März 1	34.51	66.7 25	27.39 22	15.2 8	5.47 24	54.1 8	35.03 21	60.7
11	35.04 64	64.2	27.61	14.4	5.71 25	53.3	35.24	59.8
21	35.68 74	62.2	27.85 26	14.0	5.96 28	52.4 11	35.48 27	59.3
31	36.42 80	60.7	28.11	14.0	6.24	51.3	35.75 28	59.3
April 10	37.22 83	59.8	28.40	14.4	6.55	50.1	36.03	59.6
20	38.05 86	59.5	28.69	15.1	0.80	48.9	36.33	60.3
30	38.91 83	59.9	20.00	16.3	7.19 33	47.0	30.04	61.5
Mai 10	39.74 8o	60.9 16	29.32	17.8	1.54 22	46.2	30.95 32	03.0
20	40.54	62.5	29.63	19.6	7.85	44.8	37.27	64.8
30	41.27 64	64.7	29.93 28	21.7	8.17	43.5	37.57 28	66.9
Juni 9	41.91 53	67.2 30	30.21 26	23.9	8.48	42.3	37.85 26	09.2
19	42.44	70.2	30.47	26.3	8.77 26	41.2	38.11	71.6
29	42.86	73.5	30.70 20	28.7	9.03 22	40.2 8	38.35	74.0
Juli 9	43.15	76.9	30.90	31.1	9.25	39.4	38.54	76.5
19	43.31	80.5	31.05	33.3	9.43	38.9	38.70	78.8
29	43.32 -	84.2 37	31.16	35.5 21	9.57	38.5 4	38.81	81.1 23
Aug. 8	43.19 26	87.9 35	31.23	276	9.66	38.3	38.88	83.2
18	42.93 39	91.4	31.25	39.4	9.70	38.2	38.90	85.1
28	42.54 50	94.8 31	31.22	41.I	9.70	38.4	38.88	86.8
Sept. 7	42.04 61	97.9 27	31.16	12.1	9.65 8	38.6	28.82	88.2
17		100.6	31.07	43.5	9.57	39.0	38.72	80.4
27	40.73	103.0	30.94	44.4	9.45	39.4 4	38.59	90.3
Okt. 7	39.96	104.9	30.80	44.0	9.32	39.8	38.45	000
17	39.14	TOD 4	30.05	45.2	9.17	40.2	38.29	91.2
27	38.29 86	TOH 4	20.40	45.2	0.02	40.6	28 12	01.2
Nov. 6	- 00	107.8	30.33	144.0	8.87	41.0	37.07	00.0
16		107.6	30.10	44.3	8.74	41.3	37.83	00.3
26	35.77	106.8	20.07	12.1	8.62	41.6	37.71	89.5
Dez. 6	35.03 67	105.4	29.97	42.3	8.55	41.8	37.61	88.3
16			20.01	40.0	8.50	41.0	37.54	87.0
26		101.2	20.87	20.4	8 40	41.0	27.50	85.4
36	33.37	98.4	29.88	37.8	8.51	41.9	37.50	83.7
Mittl. Ort	40.13	83.8	28.16	30.7	5.94	44-4	35.83	76.1
sec o, tu o	3.779	+3.644	1.032	+0.255		-0.333		+0.27

100	775) β I	Pavonis.	777) a	Cygni.	780) ε	Cygni.	781) E A	quarii.
1913	AR.	Dekl.	AR.	Deki.	AR.	Dekl. +	AR.	Dekl.
	20 ^h 37 ^m	66° 30'	20h 38m	44° 57′	20 ^h 42 ^m	33° 38′	20 ^h 42 ^m	9° 48′
Jan. o	5.61	77.4 27	25.85	67.6	39.71 2	35.7 24	56.82	63.6
10	5.61	74.7 28	25.80	64.9	39.69 -	33.3 25	56.86	04.0
20	5.70 21	71.9	25.79 6	62.0	39.71	30.8	56.92	04.4
30	5.91 28	08.0	25.85 10	50.7	39.78	28.0	57.03 13	04.7
Febr. 9	6.10	65.6 29	25.95	55.8 27	39.89	25.5	57.16	64.8
19	6.55	62.7 28	26.11	52.T	40.02	23.2 20	57.32 20	64.8
März 1	6.00	59.9 26	26.31	50.7	40.22	21.2 16	57.52	64.7
11	7.48 49	57.2	26.56 ²⁵	48.7	40.44	19.6	57.73 24	64.3 6
21	8.04 61	54.9 22	26.84	47.2 10	40.69	T8.4	57.97 27	63.7 8
31	8.65	52.7	27.16 32	46.2	40.98	17.7	58.24	62.9
April 10	9.29	50.9	27.51	45.8	41.29	17.6	58.52	61.9
20	0.06	40.4	27 80 37	460	41.61 32	18.0	58.82	60.7
30	10.66	48.2	28 26 30	46.8	41.95	18.0 9	50.14	50.4
Mai 10	11.26 70	47.5	28.64	48.1	42.20 34	20.3	ro 46 3*	57.0
20	12.05	47.2 3	29.01	50.0	42.63 34	22.2	59.78 32	56.3
20	66	1	35	23	33	22	31	15
30 Juni 9	12.71 64	47.3	29.36	52.3 26	42.96 30	24.4 26	60.09 31	54.8 16
	13.35 58	47.8	29.69 29	54.9 30	43.26 28	27.0 28	60.40 28 60.68	53.2
19 29	13.93	50.0	29.98	57.9 32	43.54 25	29.8 32.8 30	25	51.7
Juli 9	14.45	51.7	30.23	61.1	43.79	34.0 30	60.93	50.3
	34	19	30.44	64.4	43.99	35.8 31	18	49.1
19	15.23	53.6	30.59	67.8	44.15	38.9 31	61.33	48.0
29	15.48	55.7 23	30.68	71.2	44.26 6	42.0 29	61.46	47.1
Aug. 8	15.63	58.0	30.72	74.5	44.32	44.9 28	01.55	46.3
18	15.67 6	60.4	30.70 8	77.6	44.32	47.7 25	01.00	45.0
28	15.61	62.8	30.62	80.5	44.28	50.2	61.60	45.4
Sept. 7	15.45 26	65.1 20	30.50	83.1	44.20	52.5	61.56	45.2
17	15.19 32	67.1	30.33	85.4 23	44.07	54.4 16	61.48	45.2
27	14.87	68.8	30.12	87.2	43.92	56.0 12	61.38	45.3 2
Okt. 7	14.48 39	70.2 10	29.89 25	88.7	43.73	57.2 8	61.25	45.5 2
17	14.05	71.2	29.64	89.7	43.54	58.0	61.11	45.7
27	13.60	71.7	29.38	90.3	43.34	58.3	60.97	46.1
Nov. 6	13.17	71.7	20.12	00.2	12.T/	58.2	60.82	46.5
16	12.75	71.2	28.88	89.8 5	42.95	57.8 5	60.69	46.9
26	12.38	70.2	28.65 23	88.0	12.78	56.0		47.3
Dez. 6	12.08	68.7	28.45	87.4	42.63	55.6	60.51	47.8
	23	19	10	19	11	17	6	5
16 26	11.85	66.8	28.29 12	85.5 23	42.52 8	53.9 21	60.45	48.3
	11.70	64.5 26	28.17	83.2 26	42.44	51.8 23	2 7 2	48.8
36	11.05	61.9	28.10	80.6	42.40	49.5	60.45	49.2
Mittl, Ort	7.94	60.3	27.94	68.2	41.44	37.8	58.05	5 3 ·5
sec ô, tg ò	2.509	2.301		1 0.999	1.201		1.015	

22.00	783) 7	Cephei.	784) λ	Cygni.	785) B	Indi.	786) 32 V	ulpecul
1913	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl.
	20 ^h 43 ⁿ	61° 29′	20h 43m	36° 9'	20" 47""	58° 46'	20h 50m	27° 43
Jan. o	28.18	63.9 28	59.36	72.3	59.32	76.3	49.52	31.6
10	28 02	8 61.1	59. 3 3	60.8	59.32	73.9 25	49.51 -	29.4 2
20	27.94	0 58.0 36	59.34 6	672	59.39 16	71.4	49.53	27.2 2
30	27.94	0 54.4 22	59.40	64.2	59.55 21	68.5 26	49.58	24.9
Febr. 9	28.03	51.2	59.51	61.7	59.76	65.9	49.69	22.4
19	28.10	48 T	50.65	50.3	60.03	622	40.82	201
März I	28.42	45.3	50.84	57.2	60.35 32	60.6 26	50.00	18.6
11	2875	42.0	60.06	55 1	60.72	58.0	50.21	17.2
21	20.12	11.0	60.22	54.2	61.15	55.7	50.45	16.2
31	29.55	39.6	60.61	53.4	61.62 47	53.5	50.72	15.7
April 10	30.02	38.8	60.92	53.2	62.12	20 ET E	51.01	15.6 -
20	20.52	286 -	61.26 34	53.5	62.64 52	49.9	51.32 31	16.1
30	21 04	20 T	61.60 34	54.4	63.19 55	48.5	51.64 32	17.0
Mai 10	27.55	10.2	61.95		63.74 55	47.5	51.97 33	184
20	32.05	41.9	62.29	55.7 19	64.29 55	46.8	52.30 33	20.2
	, ,	47 22	34	22	54	2	32	1 2
30	32.52	43 44.1	62.63	59.8 26	64.83	46.6	52.62 30	22.4
Juni 9	32.95	40.8	62.94	02.4 28	05.35	46.7	52.92 28	24.8
19	33.32	49.8	63.22	65.2	65.83	47.2	53.20 25	27.5
T-1: 29	33.63	53.1	63.46		00.20	48.1	53.45 21	30.3
Juli 9	33.87	56.6	63.67	71.4	66.63	49.3	53.66	33.2
19	34.04	60.3	63.82	74.5	66.94	50.9 17	53.82 12	36.1
29	34.12	64.0 36	63.93	חחח	67.17	52.6	53.94 8	38.9
Aug. 8	34.13	0.7.0	63.99	80.7	07.32	54.6	54.02 2	41.7
18	34.05	71.1 35	63.99	83.5	67.39 -7	56.7	54.04 2	44.2
28	33.90	74.4	03.95	86.1	67.37	58.8	54.02	46.5
Sept. 7	33.68	77.5	63.86	88 5	67.28	60.8	53.95	48.6
17	33,30	80.2	60 70	00.5	67.11	62.8	53.85	50.3
27	2206	33 826 24	62.57	02.2	66.88 23	64.5	E0 772 13	51.7
Okt. 7	32.68	84.5	63.38	02.5	66,60	65.0	-a-6	108
17	32.27	85.9	63.17	94.4	66.30	67.0	52.28	53.5
0.77		86.9	21	4	32	6	10	
Nov. 6	31.85	43 87.3 4	62.06	94.8	65.98 65.66	67.6	53.20 18	53.8
16		42 87.1 2 40 87.1 8	62.75		05.00	0.7.0	53.02	53.8
26	30.60	86.2	62.55	001	65.35 27 65.08	66.9	52.85	
Dez. 6	30.23	37 84.9	62.21	93.4	64.86	65.8	52.70 13	51.3
		31 10	I	3 92.0	17	05.0	52.57	
16	29.92	26 83.1	62.08	90.3	64.69	64.3	52.46	49.7
26	29.66	80.8	61.99	88.2	64.58	62.4	52.39	47.9
36	29.46	78.1	61.94	85.8	64.54	60.2	52.36	45.8
Mittl. Ort	31.33	62.0	61.15	73.9	61.07	59.1	51.10	34-3
sec 8, tg 8		-+-1.842		+0.731		-1.650		+0.52

	788)	У	Cygni.	790) ζ Mi	croscopii.	793) 61 (ygni pr.*)	794) v A	Aquarii.
1913	AR.		Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	20h 53	m	40° 49′	20h 57m	38° 58′	21h 2m	38° 18′	21h 4m	11° 43
Jan.	53.84	5	53.8 25	23.35	33.9	57.96	75.6	50.26	38.6
10	53.79	I	51.3	23.37 6	32.7	57.92	73.3 25	50.28	38.8
20	331	4	48.6	23.43 10	31.3 16	57.92	70.8	50.32 8	39.0
30	53.82	9	45.8	23.53 16	2 9.7 ₁₈	57.96	68.2 28	50.40 12	39.2
Febr.	9 3 53.91	- 1	42.8 26	23.69	27.9	58.06	65.4	50.52	39.2
10	54.04	13	40.2	22.87	26 T	58.20	63.0	50.66	30.0
März	, , ,	18	27 0 43	24.00	24.2	58.38	6T 0	50.83	38.6
11		22	36.0	24.35	22.5	58.60	50.2	51.03	28 T
21		26	24.5	24.64	206 19	58.86	57.0	51.26 23	27.2
31		29	33.5	24.96 32	18.8	59.15	57.0	51.51	36.4
	1 3.77	33	4	34	18	32	2	28	13
April 10		34	33.1	25.30 36	17.0	59.47 34	56.8 -	51.79 29	35.2
20	7,	36	33.2 8	25.66 39	15.3	59.81 36	57.0 8	52.08 31	33.9
Mai 10		37	34.0	26.05 39	13.8	60.17 37	57.8	52.39 32	32.5 16
	1 0 0/	36	35.2 18	26.44	12.4	60.54 37	59.2 18	52.71 33	30.9 16
20	56.75	35	37.0	26.84 39	11.3	60.91	61.0	53.04	29.3
30	57.10	33	39.2	27.23	10.3 6	61.26	63.3 26	53.36	27.7 10
Juni 9	57.43	30	41.7 28	27.60 37	9.7	61.60 34	65.9 29	53.67 30	26.1
19	57.73	26	44.5 31	27.96	9.3 1	61.91	68.8	53.97 26	24.6
29		22	47.0	28.28 32	9.2 -	62.18 27	71.9	54.23 24	23.2
Juli 9	58.21		50.9 33	28.56	9.4	62.41	75.2 33	54.47	21.9
10	58.38	17	54.2	28.80	9.9	62.60	78.5	54.67	20.9
20		11	57.5	28.99	10.6	62.73	81.8 33	54.83	20.0
Aug. 8		6	60.6	29.12	11.5	62.82	8F 0 32	EARE	19.3
18		1	62 7 31	29.19	12.6	62.85	88.0	55.01	18.9
28		4	66.5	29.19 2	13.8	62.83	90.9	55.03 -	18.6
	7.5	9	20	4	14	7	26	1	1
Sept.		13	69.1	29.17 8	15.2	62.76	93.5 23	55.02 6	18.5
17	1 2 2	18	71.4	29.09	16.5	62.65	95.8 20	54.96	18.5
014	_	19	73.3 15	28.96	17.7	62.50	97.8	54.87	18.7
Okt.		22	74.8	28.80	18.8	62.32	99.3 12	54.76	19.0
17	7 57.71	23	75.9	28.61	19.7	62.13	100.5	54.62	19.3
27	57.48	23	76.5	28.42	20.4	61.93	101.2	54.48	19.7
Nov.	57.25	23	76.6	28.23	20.9	61.72	101.4 -2	54.34	20.2
16	4	20	76.3 8	28.06 16	21.0	61.53	101.2	54.21	20.6
26		18	75.5	27.90	20.9		100.5	54.10	21.1
Dez.			74.2	27.77	20.5	61.18	99.4	54.01	21.5
16		16	17	27.68	6	13	97.8	7	4
26		II	72.5	27.63	19.9	60.05	050	53.94 4	21.9
36		8	70.4 68.0 ²⁴	27.62	18.9	60.95 6 60.89	95.9 21 93.8	53.90	22.5
3.	33.30		30.0	4/.04	1/.0	50.09	93.0	53.90	~~.)
Mittl. Ort			54.0	24.60	18.8	59.77	75.8	51.41	28.3
sec 8, tg 8	T.222		1-0.864	1.286	0 800	1.274	+ 0.790	1.021	-0.207

^{*)} Die jährliche Parallaxe ist bereits angebracht.

	795) Br	. 2777.	797) (Cygni.	800) a E	quulci.	803) α (Jephei.
1913	AR.	Dekl.	AR.	Dekl. - -	AR.	Dekl.	AR.	Dekl.
	21 ^h 7 ^m	77° 46′	21 ^h 9 ^m	29" 51'	21 ^h 11 ^m	4" 53'	21 ^h 16 ^m	62° 12′
Jan. o	8.67 60	3 ¹ .3 ₂₆	12.40	69.2	27.31	8.7	27.14	64.8
10	8.07	28.7 30	12.36	67.0	27.31	7.6	26.92	62.3
20	7.62 26	257	12.36	64.8	27.34 6	6.4	26.77	59.4 31
30	, 7.36 6	22.5 26	12.40 8	02.4	27.40	5.3 ₁₀	26.70	56.3
Febr. 9	" 7. 3 0 —	10.9	12.48	59.9	27.50	4.3	26.72	52.8 33
19	7.45	15.7	12.60	57.8	27.62	3.5 6	26.82	49.6
März 1	7.79 34	12.6	12.75	55.9 19	27.77 19	2.0	27.00	46.7 27
11	8.31 67	0.8	12.94	54.4	27.96	2.6 3	27.27	44.0 22
21	8.98 82	7.5	13.17 26	53.2 7	28.17	2.5	27.61 34	41.8
31	9.80	5.6	13.43	52.5	28.41	2.8 6	28.01	40.I
April 10	10.72	4.2	13.72	52.3	28.68	3.4	28.45	39.0 6
20	11.71	3.5	14.02	52.6 3	28.96	4.4	28.05	38.4
30	12.75	3:4	14.35	53.4	29.26 30	5.6	29.47	38.5
Mai 10	13.79	4.0	14.68 33	54.7	29.57	7.1 15	29.99	39.2
20	14.80	5.I	15.02 34	56.4	29.89 32	8.8	30.52	40.5
30	15.76 00	6.8	15.35	58.5	30.20	10.7	31.03	42.3
Juni 9	16.64	0.0 22	15.67	60.0	30.50	12.8	31.50	446 25
19	17.40 60	11.6	15.06	626	20.70	14.9	21 02 43	17.1
29	18.03 48	14.7	16.23 27	66.4	31.05	17.0	22.21	50.5
Juli 9	18.51	18.0	16.45	69.3	31.28	19.0	32.61	53.0
19	18.83	21.5	16.64	72.3	31.47	20.9	32.85	57.5
29	18.98	25.2 37	16.78	75 2 29	21.02	22.7	22.00	6-0 3/
Aug. 8	78.07	28.9 37	16.87	78.0	21.72	24.3	33.08	64.8 30
18	18.79	22 6 37	16.01	80.7	21.80	25.8	33.07	68.5
28	18.45	36.2	16.91	83.2 25	31.82	27.0	32.98	72.0 35
Sept. 7	17.95	35	16.86	85.5	31.80 2	28.1	32.82	75.2
17	17.21	12.8	16.77	87 1	31.74	28.9	32.59 23	75.3 30 78.3
27	16 55 70	156 40	16.64	89.0	21.65	29.4	32.30 29	81.0
Okt. 7	15.68	48.1	16.40	90.3	21.54	20.8	31.96	83.3
17	14.73	50.1	16.32	91.2	31.41	29.9	31.59 37	85.1
27	102	51.6	16.14	5	14	1	31.18	86 5
Nov. 6	13.71	52.6	15.96	91.7	31.27	29.8 29.6	30.76	87.2
16	11.59	53.0	15.79	91.6	21 00 13	20.T	30.76	87.5
26	10.54	52.8	15.62	00.0	20.88	28 5	20.03	87.2
Dez. 6	9.55	52.0	15.48	89.8	30.78	27.7	29.54	86.3
16	8.63	13	11	88.3	7	26.8	35	84.8
26	7 8T 02	488	15.37	86.6	30.71	25.8	29.19 28.88	82.0
36	7.12 69	46.4	15.22 6	84.6	30.65	24.7	2 8.64 ²⁴	80.4
Mittl. Ort	15.60	25.6	13.97	70.4	28.52	15.2	30.23	60.0

1	804) 1	Pegasi.	805) γ Ι	Pavonis.	806) ζ Ca	pricorni.	808) β A	.quarii.
1913	AR.	Dekl.	AR.	Dekl.	AR,	Dekl.	AR.	De k l.
	21 ^h 18 ^m	19" 25'	21 ^h 19 ^m	65° 45′	21 h 21 m	22° 47′	21h 26m	5° 57′
Jan. o	2.41	51.2	14.08	57.1	41.11	32.0	57.72	24.6
IO	2.38	49.5 18	13.98	54.6	41.11	31.7 5	57.72 2	25.2
20	2.38	47.7 18	13.97	51.8	41.13	31.2	57.74 5	25.7
30	2.43	45.9 20	14.04	48.8	41.20	30.7	57.79	20.1
Febr. 9	°2.51	43.9	14.21	45.4	41.31	29.8	⁸ 57.88	26.4
19	2.62	42.3	14.45 32	42.3	41.44	28.9	57.99	26.5
März 1	2.76	40.9	14.77	39.2	41.61	27.9	58.14	26.4
11	2.94 21	39.9 8	15.10	36.1 29	41.80	26.7	58.31	20. L
21	3.15 25	39.1	15.62 52	33.2 26	42.03	25.3	58.52 23	25.0
31	3.40	38.8 -	16.14	30.6	42.28	23.9	58.75 26	24.8
April 10	3.66	38.9 6	16.70 61	28.2	42.56	22.3 16	59.01 28	23.8
20	3.95	39.5	17.31 64	26.0	42.86 32	20.7	59.29 30	22.6
30	4.20	40.4	17.95 66	24.3	43.18 34	19.0 16	59.59 31	21.1
Mai 10	4.58 32	41.8	18.61 67	22.9 9	43.52	17.4	59.90 32	19.5
20	4.90 32	43.6	10.28	22.0	43.86 37	15.8	60.22	17.8
30	5.22	45.6	19.95 64	21.4	44.21	14.2	60.54	16.0
Juni 9	5.52 30	17.8	20.59 61	21.3	44.54 33	12.9	60.86 32	14.2
19	5.82 26	50.2	21.20	21.7 4	44.86	11.7	61.15 28	12.4
29	6.08 23	52.8 26	21.77 57	22.5	45.16 30	10.7	61.43 25	10.7
Juli 9	6.31 20	55.4 26	22.20	23.7	45.43	9.9	61.68	9.0
19	6.51	58.0	22.68	25.2	45.66	9.4	61.89 18	7.6
29	6.66	60.5	23.01 33	27.2	45.84	9.1 3	62.07 13	6.3
Aug. 8	6.77	63.0 25	23.24	29.3 23	45.98	9.0 -	62.20 8	5.3
18	6.83	65.2 20	23.38	31.6 24	46.07	9.2	62.28	4.4
28	6.84 —	67.2	23.40 -	34.0	40.11	9.5	62.32	3.8
Sept. 7	6.82	60.0	23.33	36.4	46.11	10.0	62.32	3.3
17	6.75	70.5	22.16	28.7 -3	46.06 5	10.6	62.28	3.T
27	6.66	71.7	22.01	40.8 18	15.08	11.3	62.21 7	3.0
Okt. 7	6.53	72.7 6	22.59 38	42.6	45.86	12.0 7	62.11	3.1
17	6.39	73.3	22.21	44.0	45.73	12.8	61.99	3.3
27	6.24	73.7	21.81	45.0	14	13.4	61.86	3.6
Nov. 6	6.00	73.6	21.38 43	45.5	45.59 15	14.0	61 72 13	4.0
16	5.04	$73.3 \frac{3}{6}$		45.5	45.30	14.4	61 60	4.5
26	5.80	72.7		45·5 6 44·9	45 T7	14.7	6T 48	
Dez. 6	5.68	71.8	20.22 35	43.8	45.07	14.9	61.38	5.6
16	9	12	10.02	14	ð.	15.0	61.31	6т
2 6	5.59 7	70.6	19.93	42.4	44.99 5	14.9	61.26 5	6-
36	5.5 2 5.47	67.5	19.71	40.4 38.0	44.94 3	14.6	61.23	7.3
Mittl. Ort	3.76	54.2	15.80	38.2	42.15	19.5	58.80	15.9
sec ô, tg ô	1.060	+0.353	2.436	-2.221	1.085	-0.420	1.005	-0.104

	809) β (Jephei.	810) v 0	ctantis.	811) 74	Cygni.	815) ε I	egasi.
1913	AR.	Dekl.	AR,	Dekl.	AR.	Dekl. -F	AR.	Dekl.
	21 ^h 27 ^m	70° 10'	21 ^h 31 ^m	77° 46′	21 ^h 33 ^m	40° 1'	21 ^h 39 ^m	9° 28′
Jan. o	28.36	49.9 25	47.68	57.9 29	25.89 8	22.6	53.63	27.8
10	27.99 37 28	47.4 28	47.34	55.0 22	25.81	20.3 24	53.60	26.5
20	27.71	44.6	47.16	51.8 34	25.70	17.9 26	53.60	25.3
30	27.54 6	41.5	47.15	48.4	25.75	15.3 26	53.63 6	24.0
Febr. 9	27.48	38.0	47.30	44.9	25.78	12.7	53.69	22.8
19	27.56	34.8	47.67	41.0	25.87	9.9 23	53.79 12	21.7
März 1	27.74	31.7	48.16	37.5	26.00 18	7.0	53.91 16	20.9
11	28.05	28.8	48.80 78	34.1	26.18	5.6	54.07	20.3
21	28.46	26.4	49.58 89	30.9 29	26.40 26	3.9 11	54.26	20.1
31	28.96	24.4	50.47	28.0	26.66	2.8	54.48	20.2
April 10	29.53 64	23.0	51.46 108	25.4	26.95	2. I	54.73 27	20.6
20	30.17 67	22.1	52.54	23.2	27.28	2.0	55.00 29	21.4
30	30.84 69	21.9	53.68	21.4	27.63 36	2.4 9	55.29 31	22.6
Mai 10	31.53 69	22.4	54.87	20.0	27.99	3.3	55.60	24.0
20	32.22	23.4	56.07	19.1	28.36	4.7	55.92	25.7
30	32.89 62	25.0 21	57.26 116	18.7	28.72	6.6	56.24 31	27.7
Juni 9	33.51 56	27.I ₂₆	58.42	18.8	29.07 35	9.0 26	56.55	29.8
19	34.07	29.7	59.52	19.4	29.40 30	11.6	56.85 28	32.0
29	34.50	32.7	60.54 8g	20.5	29.70 26	14.5	57.13	34.2
Juli 9	34.96	30.0	61.43	22.0	29.96	17.6	57.38	36.5
19	35.26 20	39.5	62.19 60	240	20.18	20.8	57.59 18	38.7 2
29	35.46	43.2	62.79	26.2	30.35	24.1 33	57.77	40.8
Aug. 8	35.56 = 2	46.9 37	63.22 43	28.8	30.46 6	27.4 33	57.90	42.7
18	35.54 12	50.7 36	63.45	31.5	30.52	30.5 30	57.99	44.5
28	35.42	54.3	63.49	34.3	30.53 —	33.5	58.04	46.0
Sept. 7	25.20	57.8 35	62.24	37.0	30.49 8	36.2	58.04	47.4
17	24.88	61.1 33	63.01 33	20.7	30.41	28.8	58.01	48.4
27	34.48	64.0 26	62.50 6	42 T	30.28	40.9 18	57.94	40.2
Okt. 7	34.02 53	66.6	61.87	AAT	30.13	42.7	57.84 11	49.9
17	33.49	68.8	61.09	45.8	29.94	44.2	57-73	50.3
27	22 OT	70.4	60.24	46.0	29.74	45.2	57.60	50.4
Nov. 6	32.31 61	71.6	50.24	17 5	20.52	45.7	57.46	50.3
16	31.70 61	72.1	58.44 85	47.5	29.32	45.8	57.33	40.0
26	31.09 58	72.1 6	57.57 8	46.8	29.12	45.4 8	57.21	49-4
Dez. 6	30.51	71.5	56.76	45.6	28.93	44.6	57.10	48.7
16	29.96		56.05	42.0	28.77	43.3	57.01 8	47.8
2,6	20.48	68.6	55.48	11.6 43	28.62	41.6	56.93	46.7
36	29.06 42	66.4	55.04	38.9	28.53	39.5	56.89	45.6
Mittl. Ort	32.56	43.1	50.47	37.9	27.63	20.1	54.78	32.2
sec δ, tg δ		-1 2.7 74	1	-4.616	1			4-0.160

	819) ō Ca	pricorni.	821) π^2	Cygni.	822) γ	Gruis.	823) 16	Pegasi.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	21h 42m	16° 31′	21 ^h 43 ^m	48° 54′	21h 48m	37° 46′	21h 49"	25° 30
Jan. o	13.49	32.2	32.64	28,6	38.95	44.1	4.83 6	55.4
10	13.47	32.2	32.50	26.3 25	38.91 1	42.0	4.77	53.7
20	13.48	32.2	32.40	23.8 28	38.90	41.7	4.74	51.8
30	13.52	31.9	32.36	21.0	38.93 8	40.2	4.74 3	49.8
Febr. 9	13.59	31.5	32.36	18.2	39.01	38.5	4.77 8	47.8
19	13.70	30.0	32.43	15.1	30.13	36.5 20	4.85	45.8
März 1	13.84	30.2 7	32.55	12.4 24	39.28 19	24.5	4.97 15	44.1
11	14.01	29.3	32.73	10.0	39.47	32.4 22	5.12 18	42.7
21	14.21	28.2	32.95 28	8.0	39.70 26	30.2	5.30 23	41.6
31	14.44	20.9	33.23	0.5	39.96	28.0	5.53	41.0
April 10	14.70 28	25.4	33.56	5.4	40.26	25 8	5.78 28	408 -
20	14.08	23.0	33.01	5.0	40.58 32	22 -	6.06	410
30	15.20	22.2	24.20 39	5.1 6	40.50 36 40.94 37	21.7	6.37 31	41.7
Mai 10	15.61 32	20.5 18	34.70	5.7 12	41.31 38	TO X	6.60	42.8
20	15.94 33	18.7	35.11	6.9	41.09	18.1	7.02 33	44.3
30	16.27	17.0	35.52 20	8.7	42.08	16.6	7.35	46.2
Juni 9	16.60 33	15.3	25.01	100	42.47 39	15.1	7.68 33	18.1
19	16.02 32	13.8	36.28	12.5	42.84 37	14.5	8.00 32	50.9 26
29	17.22	12.5	26.62 34	16.4	12.20	T40	8.29 26	53.5 28
Juli 9	17.49	11.3	36.91	19.6	43.52 3~	13.7	8.55	56.3
19	17.72	10.3	37.15	23.0	43.80	13.8	Q 77	COL
29	17.02	9.6	27.24	26.4	1104	14.2	8.05	61.8
Aug. 8	18.07	0.1	27 47	20.0 35	44.22	14.0	0.00	64 5
18	18 18 11	8.0	2754	33.3	44.35 8	15.0	0.18	67.1
28	18.24	8.8		36.6	44.43	17.0	9.23	69.5
Sept. 7	18.25	9.0	27.50	20.8	44.45	18.4	9.23	71.7
17	18.24	9.3	37.5° 10 37.4°	126	14 12 3	TO 8 14	9.18 5	727
27	18.17	9.8	27.26	45.2	14.24	21.2	OIT	75.2
Okt. 7	18.07	102 5	27.07	47.4 18	44.22	22.6	0.00	767
17	17.96	10.9	36.85	49.2	44.08	23.8	8.87	77.7
27	17.83	6	36.61	706	17	11	8.72	78.4
Nov. 6	12	11.5 6	26 26 25	50.6	43.91	OF X		78.7
16	17.70 17.57	12.1	36.10	51.4 51.8 4	43.74 ₁₈ 43.56 ₁₇	26.4	8.57 8.42	78.7
26	17.44	13.1	25 85 3	51.7	12.20	26.7	8.27	780
Dez. 6	17.34	13.5	35.61 24	51.0	43.24	26.7	8.13	77.5
	9	3	22	12	12	4	12	10
16 26	17.25 6	13.8	35.39 20	49.8 16	43.12 10	25 5	8.01	76.5
36	17.19 17.16 3	14.0	35.19	48.2 21 46.1	43.02 6 42.96	25.7 24.8 9	7.91 8 7.83	75.1
30	1/.10	14.J	35.04	40.1	42.90	44.0	7.03	73.5
Mittl. Ort	14.44 ●	21.3	34.67	23.6	39.86	28.4	6,16	55.3
sec 8, tg 8	1.043	0.297	1.521	+1.146	1.265	-0.775	1.108	+0.477

	827) a A	.quarii.	828) ı A	quarii.	830) 20	Cephei.	829) a	Gruis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	22 ^h 1 ^m	o° 44′	22 ^h I ^m	14° 17′	22 ^h 2 ^m	62° 21'	22 ^b 2 ^m	47° 22
Jan. o	18.00	41.0	43.54	41.9	18.97 28	48.0	44.48 8	76.1
10	17.97	41.7 8	43.51	42.0	18.69	45.9 26	44.40	74.6
20	17.96	42.5 6	43.51	42.0 I	18.47	43.3 28	44.36	72.9
30	17.97	43.1	43.53	41.9	18.32	40.5 30	44.37	70.9
Febr. 9	18.02	43.6	43.58	41.6	18.24	37.5	44.42	68.7
19	18.10	44.0	43.67	41.I	T8 2.4	24.1	44.53	66.1
März 1	18.21	44.2	43.78	40.4 8	18.34 18	31.1 28	44.68	63.5
11	18.35	44.2	43.92	39.6	18.52 26	28.3	44.87	60.9
21	18.52 20	43.8 6	44.10	38.5	18.78	25.8 20	45.11	58.2
31	18.72	43.2	44.31	37.3	19.11 33	23.8	45.38	55.6
April 10	18.95	12.1	44.55	35.9 16	19.51	22.2	45.71	53.0
20	TO 2.T	41.3	44.82	242	19.96	21.1	46.06 35	50.6
30	10.50	20.0	45.11	22.5	20.46	20.7	46.45	18.4
Mai 10	то.80	28 2	45.42	20.77	20.00 53	20.9	46.86	46.3
20	20.11	36.5	45.75	28.9	21.53	21.7	47.29 43	44.6
30	33	19	46.08 33	19	22.06	13	44	I
Juni 9	20.44 32 20.76	34.6 32.6	46.41 33	27.0	22.58 52	23.0 19	47.73 44	43.2 42.1
19	21.06	30.6	46.73	25.3 23.6	23.07 49	24.9 27.2	48.59	41.3
29	21.26 30	28.6	17.02 30	220	23.52 45	30.0	49.00	41.0
Juli 9	21.62	26.7	47.31	20.7	23.91 39	33.1	49.37	41.1
	24	18	25	12	32	34	33	
19	21.86	24.9 16	47.56 21	19.5	24.23	36.5	49.70 28	41.5
A 1110 8	22.06 16		47.77 16		24.48		49.98	42.3
Aug. 8	22.22	21.0	47.93	17.9	24.66	43.7 37	50.21 16	
28	22.33 7	20.6	48.06 8		24.75		50.37 TO	44.9
	22.40	19.6	3	17.3	24.77		50.47	46.5
Sept. 7	22.43	18.8	48.17	17.3	24.71	54.6	50.50	48.3
17	22.42	18.3	48.17	17.5	24.58	58.0 31	50.48	50.2
27	22.38	17.9	48.12	17.8	24.38 26	61.1 28	50.39	52.0
Okt. 7	22.30	17.8	48.04	18.3 6	24.12	63.9	50.26	53.8
17	22.20	17.8	47.94	18.9	23.81	66.2	50.09	55.4
27	22.09	17.0	47.83	TOF	22.46	68 0	40.00	56.8
Nov. 6	21.97	18.2	47.70	20.1	1 23.08	0.00	40.60	57.8
16	21.85	18.7	47.57	20.6	22.00	70.5	49.47	58.5
26	21.73	TO 2	177 15	21.2	22.20	70.0	49.26	58.8
Dez. 6	21.62	19.8	47.34	21.7	21.89	70.7	49.06	58.7
16	21.53	20.5	47.25	22.I	21 52	60.8	48.80	58.2
26	21.46	21.2	47.18	22.4	21.17	68.4	1875	57.4
36	21.41	21.9	47.13	22.5	20.87	66.6	48.65	56.1
Mittl. Ort	18.96	34.6	44.41	31.8	21.80	39.3	45.32	58.5
sec 8, tg 8	1,000	-0.013			2.155	-1-1.909		-1.08

	834) 8	Pegasi.	835) n	Pegasi.	836) \$ (Cophei.	837) 24	Cephei.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	22 ^h 5 ^m	5° 45′	22 ^h 6 ^m	32" 44'	22h 7m	57° 46′	22 ^h 8 ^m	71° 54′
Jan. o	47.68	65.4 10	5.92	66.2 18	47.62	27.9	4.06	55.4 21
10	47.65 3	64.4	5.83	64.4	47.39 18	25.8 25	3.57	53.3 24
20	47.63	62 4	5.77	62.4	47.21	23.3 27	3.10	50.9 28
30	47.64	62.4	5.74	60.2	47.09 6	20.6 29	2.86	48.1 31
Febr. 9	47.67 8	61.5	5.75	58.0	47.03 -	17.7	2.68	45.0
19	47.75	60.7	5.80	55.6	47.04 8	14.4	2.62 -	41.6
März I	47.85	60.1	5.80	53.6	47.12	11.5	2.70	38.4 34
11	47.08	50.8	6.02	51.8	47 27 *3	8.8 4	2.01	35.4
21	48 TE 1/	59.8	6.20	50.4	17.50	6.4 20	3.25	32.7
31	48.35	60.1 3	6.42	49.4	47.79	4.4	3.69 44	30.4
April 10	48.58	60.6	6.67	48.8	48 T4	2.9	4.24 6-	28.6
20	48.83	61.5	6.96	$\frac{48.7}{1}$	48.55	2.0	187	27 2 13
30	49.11	62.7	7.27	49.0	48.99	1.6 4	5.57 70	26.5
Mai 10	49.42	64.2	7.60	40.0	10 16 4/	T 8 2	600	26.4
20	49.73	65.9	7.95	51.2	49.40 48	2.6	7.06	26.9
	32	19	3.	5 7	48	13	75	11
Jun: 30	50.05 32	67.8	8.30	52.9 21	50.42	3.9 19	7.81	28.0 16
Juni 9	50.37 31	69.9	8.65	55.0 25	50.89 45	5.8 24	8.53 68	29.6
19	50.68	72.0 22	8.98	57.5 26	51.34 41	8.2	9.21 61	31.8 26
Juli 9	50.97	74.2	9.29	60.1	51.75 37	10.9 31	9.82	34.4 30
Juli 9	51.24	76.3	9.58		52.12	14.0	10.35	37.4
19	51.48	78.4	9.82	66.0	52.42	17.3	10.80	40.7 36
29	51.68	1802	10.02	000	52.67 18	20.8	11.13	44.3
Aug. 8	51.84	82.1	10.18	72.0	52.85 11	24.5 36	11.36	48.0
18	51.96	83.7	10.28	74.9 28	52.96	28.1	11.47	51.0 28
28	52.03	85.1	10.35	77.7	52.99	31.7	11.47	55.6 37
Sept. 7	52.06	86.3	10.36	80.3	52.96	35.2	11.35 22	50.3
17	52.05	87.3	I TO 22	$\frac{3}{7}$ 82.6 $\frac{23}{21}$	52.87 16	38.4	11.13	62.8 35
27	52.01	88.0	10.26	84.7	52.71 20	41.4	10.82 40	66.1 33
Okt. 7	51.94	88.5	10.15	86.4	52.51 25	44.1	10.42	69.2
17	51.84	88.7	10.02	87.8	52.26	46.4	9.93	71.9
27	51.73	88.8	9.87	88.0	51.97	48.3	9-39 61	74.I
Nov. 6	5 T.6T	88.7	0.71	80.5	51.66	40.7	8 79 01	75.8
16	1 2	88.4	9.54	89.8 -3	51.33	506	8 15 3	77.0 6
26	I 5 T.27	87.0	9.37	89.6	51.00	50.0		77.0
Dez. 6	51.26	87.2	9.21	89.0	50.67 33	50.7	6.86	$77.7 \frac{1}{6}$
16	51.16	86 - 7	_ I	4 88.1 ⁹	31	0	6 22	0
26	51.16	85.6	9.07		50.36 50.08	49.9	6.23 58	77.1
36	51.03	84.6	8.94 8.84	85.1	49.83	48.5 18	5.65 52	75.9 17
30	1	04.0	0.04	05.1	49.03	40.7	5.13	/4.4
Mittl. Ort	48.68	69.9	7.32	63.3	50.03	19.5	8.26	44.9
sec ò, tg ò	1.005	101.0	1.189	-1-0.643	1.875	+1.586	3.221	-+3.061

-2.46	840) N A	Aquarii.	841) a T	ucanae.	842) γ Α	Aquarii.	844) 3 L	acertae.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	22 ^h 12 ^m	8° 12′	22h 12m	60° 41′	22 ^h 17 ^m	1° 49′	22 ^h 20 ^m	51° 47′
Jan. o	13.79	69.0	32.20 16	57.I ₂₀	8.92	40.4	6.20 18	42.3
10	13.75	69.4 4	32.04 10	55.1 ,,	8.87 5	41.1 6	6.02	40.4
20	13.74	69.7	31.94	52.8	8.85	41.7 6	5.87	38.1 26
30	13.74	69.9	31.89 =	50.1 28	8.85	42.3	5.76 6	35.5 28
Febr. 9	13.78	70.0	31.91	47.3	8.88	42.7	5.70	32.7
19	13.85	69.9	32.00	44.3	8.94	43.0	5.70	30.0
März 1	13.96	69.6	32.17	40.8 35	0.04	43.1	5.77	26.9 31
11	14.09 16	69.1 8	32.39	37.6 32	9.16	42.9	5.90 19	24.4 23
21	14.25	68.3	32.68	34.4	9.32	42.5	6.09 25	22.I
31	14.45	67.3	33.02 34	31.4	9.51	41.9	6.34	20.2
April 10	14.68	66.1	33.42	28.4	9.73	41.0	6.64	18.8
20	T4 02 25	64.7	33.87 45	25 7 27	0.08 25	39.8	6.00 35	17.9
30	15.21	62.1	34.36 49	22.2	10.20	38.4	7.27	17.6
Mai 10	15.52	61.4	34.80	21.2	10.56	26.7	7.79	T7 8 "
20	15.83	59.5	35.44	19.5	10.87 31	34.9	8.22 43	18.6
40	33	19	50	14	32	19	44	14
Juni 9	16.16 16.48 32	57.6	36.00	18.1	11.19	33.0 20	8.66	20.0
	16.80 32	55.7 19	36.57 55	17.2 16.8	11.51	31.0	9.09 41	21.8
19 29	17.10 30	53.8 18 52.0 16	37.12 53	16.8	- 30	29.0	9.50 38	24.1 26
Juli 9	17.38	10	37.65 38.14	5	12.13 28	27.0	10.23 35	′ 30
9	25	50.4	43	17.3	12.41	25.1	30	29.7
19	17.63	48.9	38.57	18.2	12.65	23.3 16	10.53	33.0
1 29	17.84 18	47.0	38.94	19.6	12.87	21.7	10.78	30.3
Aug. 8	18.02	46.6	39.24 21	21.4 19	13.04	20.3	10.96	39.8
18	18.15	45.8 6	39.45	23.3	13.17	19.1	11.09	43.3
28	18.24	45.2	39.58	25.5	13.26	18.2	11.16	46.8 34
Sept. 7	18.28	44.8	39.63	27.8 24	13.31	17.4	11.16	50.2 31
17	18.28	44.7	39.59	30.2 23	13.31	16.9 5	11.11	53.3
27	18.24	44.7	39.47 20	32.5 22	13.28	16.6	11.01	56.2 26
Okt. 7	18.18	44.9	39.27	34.7	13.22	16.5	10.86	58.8 20
17	18.09	45.3	39.03	36.7	13.13	16.5	10.67	61.0
27	17.08	45.7	38.73	38.2	13.03	16.7	10.45	62.8
Nov. 6	17.86	46.2	38.41	20.2	12.01	17.0 3	TO 21 4	64.1
16	17.74	46.7	38.08 33	40.1	12.70	17.5	0.05	65.0
26	T7.62	47.3	27.74	40.4	12.68	180	0.60	65.3
Dez. 6	17.51	47.8	37.41	40.1	12.57	18.6	9.43	65.I
16	17.42	48.4	27	8	9	7	-5	7
2 6	THAT	48.9	37.14	39.3	12.48	19.3 6	9.18	64.4
36	17.35 6 17.29	49.3	36.90 ₂₀ 36.70	38.0 17 36.3	12.40 6 12.34	19.9	8.94 21	63.2
Mittl. Ort	14.64	60.8	33.07	37.4	9.79	34.2	8.17	34.1
sec o, tg o	1.010	0.144	2.043	1.781	1.000	0.032	1.617	+1.270

	848) 7 L	acertae.	850) η	Aquarii.	852) 10 I	acertae.	855) \$1	Pegasi.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	22 ^h 27 ^m	49° 49′	22 ^h 30 ^m	0" 33'	22 ^h 35 ⁿ	38° 35′	22h 37m	10° 22′
Jan. o	40.45	73.9 18	52.36	64.1	19.92	55.9 17	6.46	34.8
10	40.27	72.I 22	52.31	04.8	19.79	54.2	6.39	33.8
20	40.13	69.9 25	52.27	65.4	19.69	52.3	6.34	32.7
30	40.02 6	67.4 26	52.26	66.0	19.62	50.1	6.32	31.6
Febr. 9	39.96	64.8	52.28	00.5	19.58 -	47.8 23	6.32	30.5
19	39.96	62.0 29	52.32	66.q	19.59 6	45.5	6.36	29.5 8
März 1	40.02	59.1	52.41	67.0	19.65 10	43.0 20	6.43	28.7 6
11	40.13	56.6 25	52.52	66.9	10.75	41.0 18	6.53	28.I
21	40.21	54.4 18	52.66	666	19.90	30.2	6.67	27.8
31	40.54	52.6	52.84	66.0	20.10	37.8	6.84	27.8
April 10	40.83	51.2	21	65.1	20 24	36.8	7.04	28.1
20	41.15	50.3	53.05 53.29	64.0	20.34 28	36.3	7.28 24	28.8
30	41.15 37	$\frac{50.3}{50.0} \frac{3}{2}$	/	62.6	20.93	36.3	27	29.8
Mai 10	41.92	102	53.56	61.0	21.28 35	36.7	7.55 29	21 1 13
20	42	51.0	53.85 54.16	10	21.64 36	10	8.15	32.7
	42.34	12	32	59.2	37	37.7	32	19
30	42.76	52.2 18	54.48 32	57.3 20	22.01	39.1	8.47	34.6 20
Juni 9	43.18	54.0 23	54.80	55.2	22.38 36	41.0	8.80 33	36.6
19	43.59 38	56.3 26	55.12	53.2	22.74 35	43.3	9.12	38.8 23
29	43.97 34	58.9 29	55.42 20	ST 2.	23.09 31	45.8	9.43 28	41.1
Juli 9	44.31	61.8	55.71	49.2	23.40	48.6	9.71	43.3
19	11.62	65.0	55.07	47.4	22 68	51.6	0.07	45.6
29	44.87	68.3	56.19	15.7	22.02	54.7	10.10	47.8
Aug. 8	45.07	71.8 35	56 27	14.2	24.11	57.0	TO 28	40.8
18	45.21 8	75.3 35	56.52	42.0	24.26	61.0	10.53 10	51.7
28	45.29	78.7 34	56.62	41.8	24.35	64.1	10.03	53.4
Sept. 7	2	82.0	56.68	8	5	66.9	10.69	15
Sept. 7	45.28	21	56.70	41.0 6	24.40	69.6	10.09 2	54.9 13
27	45.19	85.1 88.0	76.68	40.4	24.25	72. I 25	10.70	57.2
Okt. 7	45.07	90.5	56.62	20.8	24.27	74.2	1065	cm o
17	-/	92.7	56.55	39.8	24.15	76.1	10.05 8	57.9 e
·	44.90	19	10	ī	14	15	9	1
27	44.71	94.6	56.45	39.9	24.01 16	77.6	10.48	58.8
Nov. 6	44.48	95.9	56.35	40.2	23.85	78.6	10.37	58.8
16	44.24	96.8	56.23	1 40.0 6	23.68	79.3 2	10.26	58.7
26	44.00	97.2	56.12	41.2 6	23.50 18	79.5	10.14 11	58.4 €
Dez. 6	43.76	97.1	56.01	$^{41.8}$	23.32	79.2	10.03	57.8
16	43.52	06.4	FFOT	8 42.4 7	23.15 16		0.02	57.T
26	12.20	04.2	rr 80	40 T	22.99	mm r	9.83 8	56.2
36	43.11	93.7	55.76	7 43.1 7	22.85	76.0	9.75	55.2
Mittl. Ort	42.28	65.6	53.18	58.6	21.32	49.7	7.35	36.7
sec 8, to 8		+1.184		-0.0 1 0		4-0.798	1.017	

	856) β	Gruis.	857) n	Pegasi.	859) λ	Pegasi.	860) ε	Gruis.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	22 ^h 37 ^m	47° 20′	22 ^h 38 ^m	2 9° 45′	22 ^h 42 ^m	23° 6′	22 ^h 43 ^m	51° 46
Jan. o	28.04 12	41.7	54.15	61.1	19.30	29.3 14	17.79 15	47.4
IO	27.92	40.5	54.05 8	59.6	19.21 6	27.9	17.64	46.0
20	27.84	39.0	53.97	57.9 10	19.15	26.4 16	17.53 6	44.3
30	27.80	37.1	53.92	56.0 20	19.11	24.8	17.47	42.2
Febr. 9	27.79 -	34.9	53.90	54.0	19.09 -	23.1	17.45	39.8
19	27.83	32.5 29	₃₆ 53.91 6	52.0	19.11	21.5	17.48	37.2
März 1	27.93	29.6 28	53.97 10	50.0 16	2719.17	19.8	17.57	34.1 30
11	28.07	26.8 28	54.07	48.4	10.20	18.5	17.70 18	3I.I
21	28.25	24.0 28	54.21 18	47.0	19.39 18	17.5 6	17.88	28.1 30
31	28.48	21.2	54.39	46.0	19.57	16.9	18.12	25.1
April 10	28.76	18.4	54.61	45-4	19.78	16.6	18.40	22.1
20	31	15 7	54.87	45.2	20.02 24	166	TS 72 33	10.2
30	20 42 30	12.1	55.16	15 5	20.20 28	17.2	10.11	16.6
Mai 10	20.81	10.7	55.47	16.2	20.60	18.1	19.52	T.I.1 25
20	30.23	8.6	55.81 ³⁴	47.4	20.92	19.4	19.96	12.0
	42	19	34	16	34	16	45	19
J: 30	30.65	6.7	56.15	49.0	21.26	21.0	20.41	10.1
Juni 9	31.09 43	5.3 11	56.50 35	50.9 23	21.60	23.0	20.88 46	8.7
19	31.52	4.2 8	56.85 32	53.2 25	21.93 33	25.2	21.34 45	7.6
Juli 9	31.94 40	3.4 2	57.17 30	55.7 27	22.25 29	27.7	21.79 43	7.0 6.8 _
Juli 9	32.34	3.2	57.47	58.4 28	22.54	30.2 26	22.22	0.6
19	32.69 32	3.3 6	57.74 24	61.2	22.81	32.8	22.61	7.1
29	33.01 26	3.9	57.98	64.0	23.04	35.5 26	22.95 29	7.8
Aug. 8	33.27	4.8	58.17	66.9 28	23.24	38.1	23.24 22	8.9
18	33.48	6.1	58.31	69.7 26	23.39	40.6 24	23.46	10.4
28	33.62	7.7	58.41	72.3	23.49 6	43.0	23.62	12.1
Sept. 7	22.70	0.4	58 47	74.8	23.55	45.2	23.72	T 4 T
17	22 72 -	11.4	58.48	77.2	2257	47.I	2271 -	162
27	33.68	124	58.45 6	70.2	22.55	48.8	22.70	18.4
Okt. 7	33.50	15.3	58.30	81.0	22 50	50.2	22.60	20.4
17	33.45	17.2	58.30	82.4	23.42	51.5	23.45	22.5
27	17	18.8	58.18	11	10	8	19	15
Nov. 6	33.28 19	14	58.05	83.5 8	23.32	52.3 6	23.26	24.3
16	33.09 21 32.88 22	20.2		84.3 84.8 5	23.20	52.9	23.04 23 22.81	25.8
2 6	22 66	1	57.90	84.8	23.07	53.1		27.6
Dez. 6	32.46	$\frac{21.9}{22.2} = \frac{3}{2}$	57.75 14 57.61	84.5	22.94 13	53.0	22.57 24	27.8
	19	3	14	7	13	52.6	22.33	2
16	32.27	21.9 6	57.47	83.8	22.68	51.9 10	22.11 20	27.6
26	32.10	21.3	57.34	82.7	22.57	50.9 12	21.91 16	20.9
36	31.97	20.3	57.23	81.3	22.47	49.7	21.75	25.8
Mittl. Ort	28.58	24.0	55.32	57.1	20.34	27.0	18.27	28.9
sec 8, tg 8	1.476	-r.o85	1.152	-1-0.572	1.087	+0.427	1.616	-1.260

OBERE KULMINATION BERLIN

	863) t	Cephei.	864) λ <i>Δ</i>	kquarii.	865) p	Indi.	866) 8	Aquarii.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
-	22 ^h 46 ^m	65° 44′	22 ^h 48 ^m	8° 2'	22 ^h 48 ^m	70° 31′	22 ^h 50 ^m	16° 1 6′
Jan. o	31.98 38	46.0	3.93 6	41.4	36.79	100.4	1.48	71.2
10	31.60	44.5	3.87	41.8 4	36.42 37	98.4 25	1.41	71.3
20	31.26 26	42.4 25	3.82	42.1	36.12	05.0	1.36	71.3
30	31.00 19	39.9 28	3.80	42.3 o	35.90 12	93.I 32	1.34	71.0
Febr. 9	30.81	37.1	3.80	42.3	35.78	89.9	1.34	70.6
19	30.70	34.1	3.83 6	42.2	35.76	86.6	1.37	69.9
März 1	30.69	30.8 33	3.89	41.9 6	35.83	83.0	1.42	69.1
11	30.78	27.9 28	3.99	41.3 8	36.02	79.0 36	1.53	67.9
21	30.97	25.1	4.12	40.5	36.29	75.4 25	1.00	66.6
31	31.26	22.7	4.28	39.4	30.00	71.9	1.82	65.1
April 10	31.62	20.7 16	4.48	38.2	37.11	68.5	2.03	63.5 18
20	32.07	19.1	4.71	36.7	37.65 54 61	65.4 31	2.26 23 26	61.7 20
30	32.58 56	18.1	4.98 27	35.0 18	38.26 67	62.6	2.52 29	59.7 20
Mai 10	33.14 59	17.7 -	5.26 31	33.2	38.93	00.I	2.81	57.7 20
20	33.73 60	17.8	5.57	31.3	39.65	58.0	3.13	55.7
30	24 22	18.6	5.89	20.2	40.40	56.4	3.45	526
Juni 9	34.93	19.9	6.21 32	27.3	41 17 77	55.2 6	3.78 33	51.6 ₁₈
19	35.52 39	21.7	6.54 33	25.3	41.93	54.6	4.12 34	49.8
29	36.07 33	24.0 28	6.86 32	23.4 18	42.68 75	54.5	4.44	48.1
Juli 9	36.57	26.8	7.15 29	21.6	43.38	54.9	4.75	46.6
19	37.01	29.9	7.42	20.0	44.03	55.8	5.03	45.3
29	37.38 37	22 2 33	7.66	18.6	44 60 57	572	5.28	1112
Aug. 8	27.67	36.8 36	7 87 21	17.5	45 08 40	500	5.40	12.6
18	37.87	40.5	8.03	16.6	45.44	61.1	5.66	43.1
28	38.00	44.2 37	8 15	15.9	45.69	63.6 25	5.79	43.0
Sept. 7	38.04	37	8.23	4	45.82	66.2	5.87	43.0
17	5	47.9 36	8.27	15.5	15 82	69.0	5.91	122
27	37.99 13	55.0 35	8.27	TEA	45.71	717 27	5.91	128
Okt. 7	37.67	58.2 32	8.23	15.6	45.48	74.2	5 87 4	115
17	37.40 27	61.1	8.16	15.9	45.16 32	76.6 23	5.81	15.2
· ·	32	25	8.08	. 5	42	20	9	- 8
Nov. 6	37.08	63.6	10	16.4	44.74 47	78.6 80.1	5.72	46.8
16	36.71 40 36.31	65.6 67.2	7.98 11 7.87	17.0 6 17.6 6	44.27 52	81.3	5.62	47.6
26	35.88 43	68.2	7.76	182	43.75 53	81.8	5.50 12	180
Dez. 6	35.44	68.6	7.65	18.8	43.22 42.68 54	81.8	5.38 11	48.9
	44	1	10	6	52	7	11	5
16	35.00 43	68.5 8	7.55	19.4	42.16	81.1	5.16	49.4
26	34.57	67.7	7.40 8	19.9	41.09	79.9 17	5.07 8	49.8
36	34.17	66.4	7.38	20.3	41.28	78.2	4.99	50.0
Mittl. Ort	34.77	33.4	4.60	34.2	37.26	79.4	2.07	61.5
sec à, tg à		+2.219	1.010	-0.141		-2.829	1.042	-0.292

	867) a Pis	sc. austr.	869) o Au	dromed.	870) з	Pegasi.	871) a l	egasi.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	22h 52m	30° 4'	22 ^h 57 ^m	41° 51′	22 ^h 59 ^m	27° 36′	23 ^h 0 ^m	14" 44
Jan. o	50.24 8	74.3	53.57	37.6	32.26	42.7	24. 73 8	13.4
10	50.16	73.9 7	53.42	36.1 18	32.15	41.4	24.65 6	12.3
20	50.10	73.2	53.28	34.3	32.07	39.9	24.59 5	II.I 12
30	50.06	72.3	53.18	32.2 23	32.00	38.2	24.54 2	9.9
Febr. 9	50.06	71.0	53.11	29.9	31.96	36.4	24.52	8.7
19	50.08 6	60.6	53.00 -	27.6	31.96	24.7	24.52	7.6
März 1	50.14	67.9 17	53.11 8	25.2	31.99 8	22.0	24.56	6.5
11	50.25	65.8	353.TO	22.8 24	32.07	31.3	12164	5.6
21	50.30	63.8 20	53.31 18	20.8 16	32.19 16	30.0	24.76	5.1
31	50.56	61.6	53.49	19.2	32.35	29.I	24.91	4.8
April 10	50.77	£0.2	22	180	20	28.5	25.10	4.0
20	51.02	59·3 23	53.71 27 53.98 27	17.2	32.55 ₂₄ 32.79	28.3	25 22 22	4.9
30	51.31	54.6	54.29 31	16.9	32.79 27	28.6	25 58 20	5.3 6.1
Mai 10	51.62	52.3	54.64 35	17.1	33.36 30	29.3	25.86 28	7.2
20	51.95 33	50.I	55.01 37	17.8	33.69 33	30.4	26.17	8.7
	36	21	30	II	34	14	32	1
30	52.31 36	48.0	55.39 39	18.9	34.03	31.8	26.49	10.4
Juni 9	52.07 36	46.1 16	55.70 28	20.6	34.38	33.6	20.82	12.4
19	53.03	44.5	50.10	22.6	34.72 32	35.8 24	27.15	14.5
1 1. 29	53.30	43.2	50.53 34	25.0 27	35.05 32	38.2 25	27.40	16.8
Juli 9	53.72	42.I	56.87	27.7	35.37	40.7	27.76	19.1
19	54.03 27	41.4	57.18	30.6	35.65	43.4 28	28.04 25	21.5
29	54.30 23	41.1	57.45	33.7	35.90 25	46.2	28.29 20	23.9
Aug. 8	54.53	41.1	57.68 17	$36.9 \frac{3^2}{3^2}$	36.11	48.9	28.49 17	26.1 2
18	54.72	41.4 6	57.85	40. I	36.28	51.6 26	28.66	28.2
28	54.86	42.0	57.98	43.2	36.40	54.2	28.78	30.2
Sept. 7	54.95	42.9	58.06	46.3	36.48	56.6	28.87	31.9
17	54.00	44.0	58.08 -	40.2	36.52	58 0 25	28.91	22.4
27	54.99	45.2	1 28 06 2	51.8	36.52	60.0	28.02 -	24.7
Okt. 7	£405 4	46.6	58.00	54.3	26.48	62.6	2880 3	258
17	54.87	47.9	57.90	56.4	36.42	64.1	28.83	36.6
·	10	13	12	17	10	11	7	
Nov. 6	54.77	49.2	57.78 16	58.1	36.32	65.2 8	28.76	37.1
Nov. 6	54.64 13	50.4	57.62	59.5 10	36.21	66.0	28.66	37.4
16	54.51	51.5 8	57.45 18	60.5	36.08	66.5	28.55 11	37.5
1)00 6	54.36	52.3 6	57.27 18	0.10	35.95 14	66.6	28.44 12	37.3
Dez. 6	54.23	52.9	57.09	61.0	35.81	66.4	28.32	36.9
16	54.10	53.2	56.90	60.6	35.68	65.0	28.21 10	36.2
26	53.98	53.2	56.72 16	59.7	35.55	65.0 12	28.11	35-4
36	53.89	52.9	56.56	58.4	35.44	63.8	28.02	34.5
Mittl, Ort	50.73	60.7	54.92	29.2	33.28	38.2	25.56	12.9
sec 8, tg 8		-0.579	1.343	+0.896	1.128	+0.523	1.03.1	+0.20

20.5	872) 1)	Gruis.	$873)$ c^2	Aquari i.	874) π	Cephei.	875) Br	. 3077.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekł.	AR.	Dekl.
	23 ^h 1 ^m	43° 59'	23 ^h 4 ^m	21° 38′	23 ^h 5 ^m	74° 54′	23 ^h 9 ^m	56° 41'
Jan. o	58.56	43.0	48.11 8	52.4	3.49 60	76.5	3.45 26	28.6
10	58.43	42.0	48.03	52.4	2.80 63	75.2 18	3.19 22	27.2 18
20	58.33	40.8	47.96	52.1 3	2.17	73.4 22	2.97 19	25.4 22
30	58.26	39.1	47.92	51.6	1.64 53	71.2	2.78	23.2 25
Febr. 9	58.23	37.2	47.91	50.8	1.23	68.5	2.64	20.7
19	58.23	35.0	47.92	49.9	0.05	65.6	2.55	18.0
März 1	58.28	32.6	47.06	18.7	0.81	62.5	2 50 -	15.2
11	158.38	20 7 29	48.05	17 T	5 0.85	50.1 34	2.50	12.2 30
21	5852 14	260	48.17	15 5	1.05	56.I	2.72	0.7 25
31	58.70	20.9 ₂₈ 24.1	48.32	43.7	1.39 34	53.4	2.93	7.4 -3
April 10	23	29	19	19	49	23	27	18
	58.93 27	21.2 18.4	48.51	41.8	1.88 62	51.1	3.20 33	5.6
20	59.20 32	27	48.74 26	39.7	2.50 72	49.2	3.53 39	4.1 9
Mai 10	59.52 59.86 34	15.7 26	49.00 29	37.5 22	3.22 81	47.7 9	3.92 44	3.2
20	47	13.1 10.8 ²³	49.29 31	35.3 22	4.03 86	3	4.36 46	4.0
20	60.23	20	49.00	33.1	4.89	46.5	4.02	3.0
30	60.64	8.8	49.93 34	31.0	5.78 90	46.8	5.31	3.7 12
Juni 9	61.05	6.9	50.27 34	29.0	6.68 87	47.7	5.81 48	4.9 18
19	61.46	5.4 10	50.61 34	27.1	7.55 83	49.2	0.29	6.7
29	61.87	4.4 7	50.95 32	25.5	8.38 77	51.2	6.76	8.9 26
Juli 9	02.20	3.7	51.27	24.1	9.15	53.6	1.20	11.5
19	62.62	3.5	51.57	23.0	080	56.4	7.59 39	14.4
29	62.04 32	28 3	51:84	22.I	10.41	59.6 32	7.04 33	17.6 32
Aug. 8	63.21	4.4	52 07 23	21.6	10.88 47	600 34	8.23	21.0 34
18	62 44 23	5.4	52.25	21.4	11.22 34	66.8 38	8.46	24.6 30
28	63.60	6.7	52.40	21.5	11.45 23	70.5	8.63	28.1 35
	11	16	10	4	9	39	10	36
Sept. 7	63.71 6	8.3 18	52.50	21.9	11.54 3	74.4 38	8.73 3	31.7 34
17	63.77	10.1	52.55	22.6	11.51 16	78.2	8.76 2	35.1 33
Ol-4 27	63.76	12.0	52.56	23.4 9	11.35 28	81.9	8.74 8	38.4 31
Okt. 7	63.70	13.9	52.54 6	24.3	11.07	85.4 32	8.66	41.5 27
17	63.61	15.8	52.48	25.3	10.68	88.6	8.53	44.2
27	63.47 16	17.6	52.40	26.4	10.10	91.5 26	8.35 21	46.6
Nov. 6	63.31 .0	19.1	52.30	27.4	9.62 57	94.1	8.14	48.6
16		20.4	52.18	28.3	8.97	Q6.I	7.89 27	50.2
26	02.94 10	21.3 6	52.06	29.1	8.27 79	97.6	7.62 28	51.3
Dez. 6	62.75	21.9	51.94	29.8	7.52	98.5	7.34	51.8 -
16	62.57	22.0 -	5182	30.3	6 77 75	$98.8 - \frac{3}{2}$	7.06	51.7 6
26	62.40	21.7	ET 72	30.6	6.02	98.5	677 29	FIT
36	62.25	21.0	51.62	30.7	5.29 73	97.6	6.51 26	50.0
Mittl. Ort	58.90	26.1	48.57	41.4	7.62	61.4	5.31	16.1
sec 8, tg 8	1.390	-0.965		-0.397	3.842	+3.710		+1.522

411	877) 7 7	ucanae.	879) γ Se	ulptoris.	88ο) τ Ι	egasi.	882) 4 Cas	siopejae
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	23 ^h 12 ^m	58° 42'	23 ^h 14 ^m	33° 0′	23 ^h 16 ^m	23° 15′	23 ^h 20 ^m	61° 48
Jan. o	21.32	65.8	7.40	36.2	18.88	54.0	55.98 33	32.2
10	21.09 19	54.5	7.30	35.8	18.78	52.9 14	55.65 30	31.0
20	20.90	62.7	7.21 6	35.0	18.69	51.5	55.35 26	29.3 2
30	20.75	60.4 26	7.15	34.0	18.62	50.1	55.09	27.2
Febr. 9	20.66	57.8	7.12	32.7	18.57	48.6	54.88	24.7
19	20.62	54.9	7.12	21.1	18.56	47.0	54.74 6	22.0
März I	20.64	51.8	7.15 8	20.2	18.57	45.6	54.68	19.1
11	720.73	48.3 35	8 7.22	27.0	818.64	11.2	10 EA 7T 3	16.0 3
21	20.87	44.9	724	24.8	18.74	43.2 8	54.81	13.3
31	21.08	41.5	7.49	22.3 25	18.88	42.4	55.00	10.9
April 10	27	38.2 33	7.68	19.8	17	42.0	20	8.7
20	21.35	33	24	25	19.05		55.28 35	7.0
30	22.07 39	34.9 31.9	7.92 8.19	17.3 26	19.27 ₂₆ 19.53 ₂₀	42.0	55.63 41 56.04	5.8
Mai 10	22.50 43	29.2	8.49	12.3 24	19.55 29	- /	56.51 47	5.1
20	22.97 47	26.7 25	8.82 33	24	20.13	43.0 44.2	- 51	
20	50	21	35	9.9	33	15	57.02	5.0 -
. 30	23.47 53	24.6	9.17	7.7	20.46	45.7 18	57.56 54	5.4
Juni 9	24.00	22.9	9.54 36	5.6	20.80	47.5 20	58.10	6.4
19	24.53 52	21.7 8	9.90	3.9	21.14 33	49.5	58.64 53	7.9
29	25.05	20.9	10.27	2.4	21.47	51.8 25	59.17	10.0
Juli 9	25.55	20.7 -	10.62	1.3	21.78	54.3	59.66	12.4
19	26.02	20.0	TO.05	0.6	22.07 26	56.8 26	60.11	15.2
29	26.44	21.6	11.24 26	0.2	22.22	59.4 26	60.51	18.3
Aug. 8	26.80	22.8 16	11.50 21	0.2	22.56 23	62.0	60.84 33	21.7
18	27.10 30	24.4	11.71 16	0.6 4	22.74	64.4	61,11	25.2
28	27.32	26.4	11.87	1.4	22.88	66.8	61.30	28.9
Sept. 7	27.47	28.6	17.00	2.4	22.98	69.0	13	22 5
17	1 /	31.0 24	11.99 6	3.6	23.04	710	61.43 5	32.5 36.1
27	27.54 I	44	12.07	5.0	23.04 2	72.8	61.46	39.6
Okt. 7	27 15	33.4 ₂₅ 35.9 ₂₂	12.05	6.6	23.04	74.4	61.37	42.8
17	27.29	38.2 23	11.98	8.1	23.00	75.7	61.23	45.8
	20	22	9	15	7	10	20	2
N 27	27.09 26	40.4	11.89	9.6	22.93	76.7	61.03 25	48.5
Nov. 6	26.83 28	42.2	11.77	11.0	22.84	77.4	60.78	50.8
16	26.55 30	43.6	11.64 15	12.3	22.73	77.8	60.49 32	52.6
1) 26	20.25	44.0	11.49	13.3 7	22.01	77.9 2	00.1/ 24	34.0
Dez. 6	25.94	45.0	11.35	14.0	22.48	77.7	59.83	54.8
16	25.65 28	45.0 6	11.20	14.4	22.36	77.2	59.48 25	55.0
26	25.37 26	44.4	11.07	14.5	22.24	76.4 10	50.13	54.6
36	25.11	43.2	10.96	14.2	22.13	75.4	58.79 34	53.7
Mittl, Ort	21.47	46.3	7.73	22.2	19.73	50.1	58.04	18.0
sec 8, tg 8	1.925	-1.645		-0.649		+0.430	2.116	1.86

	884) x P	iscium.	885) 70	Pegasi.	891) t An	dromed.	892) t Pi	scium.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	23 ^h 22 ^m	o° 46'	23 ^h 24 ^m	12° 16′	23 ^h 33 ^m	42° 47′	23" 35"	5" 9'
Jan. 0 10 20 30	27.80 8 27.72 7 27.65 5 27.60 1	41.8 41.1 6 40.5 6 39.9 5	44-55 44-46 8 44-38 6 44-32	50.1 9 49.2 10 48.2 10	50.79 17 50.62 16 50.46 13 50.33 11	21.2 11 20.1 16 18.5 18 16.7 20	27.87 9 27.80 7 27.73	15.2 7 14.5 8 13.7 7 13.0 7
Febr. 9	27.56	39.4 5	44.28	46.2	50.22	14.7	27.69 4	12.3 6
März 1 1 21 31	27.56 27.58 6 27.64 9 27.73 13 27.86	39.1 38.9 38.9 39.2 6 39.8	44.27 — 44.28 5 44.33 10 44.43 12 44.55	45.2 8 44.4 6 43.8 5 43.3 1 43.2 —	50.15 50.12 3 50.15 9 50.24 13 50.37	12.5 23 10.2 22 8.0 22 5.8 22 4.0 18	27.67 1 27.68 4 27.72 8 27.80 12 27.92	11.7 11.3 11.0 11.0 11.3
April 10	28.02 28.22	40.6	44.72 20 44.92	43.3 5	50.56 50.79	2.5 10	28.07 20 28.27	11.9 8 12.7
Mai 10 20	28.47 26 28.73 29 29.02	43.0 16 44.6 17 46.3	45.16 ²⁴ 45.43 ₃₀ 45.73	44.6 45.8 47.2	51.08 29 51.41 33 51.77 36	0.9 0.8 $\frac{1}{3}$	28.50 26 28.76 28 29.04	13.8 14 15.2 16.8
Juni 9	29.33 32 29.65 33 29.98 33	48.3 20 50.3 21 52.4 21	46.04 46.36 46.69 33 46.69	50.8 52.9 21	52.15 52.54 52.94 39	2.0 3.2 17 4.9	29.35 32 29.67 33 30.00 33	18.6 20.6 21 22.7
Juli 9	30.30 31 30.61 28	54.5 56.6	47.02 47.33 28	55.1 57.4	53·33 53·70 34	9.5	30.63	24.8
Aug. 8 18 28	30.89 26 31.15 23 31.38 19 31.57 14	60.3 62.0 14 63.4 64.6	47.61 47.87 48.10 19 48.29 48.44	59.7 61.9 64.0 66.0 67.8	54.36 32 54.63 22 54.85 17	12.2 29 15.1 31 18.2 31 21.3 31 24.4	30.92 31.19 31.42 31.62 31.78	31.0 32.8 34.5 35.9
Sept. 7	31.82	65.6	48.55 48.62	69.5	55.15 8 55.23	27.5 30.4	31.99	37.I 10 38.I 0
Okt. 7	31.92 31.92 31.89	67.0 67.1	48.65 48.65 48.62	72.I 73.0 73.7 73.7	55.26 55.25 55.20	33.2 26 35.8 23 38.1 20	32.04 32.04 32.02	28.0
Nov. 6	31.75 8	66.8	48.48 48.39	74.4	55.11 54.99 54.85	40.I 41.8 12 42.0	31.98 31.91 31.83	39.8 1 8 39.7 2 9 39.5 4
Dez. 6	31.47	65.9 6	48.29 i 48.18 i 48.08	74.3	54.69 54.52	7 43.9 44.3	31.74 31.64	39.1 38.6 6
26 36	31.27	64.1 7	47.08	72.7	54.34 1 54.16 1 53.98	100	21.44	9 37.3 7 9 36.6
Mittl Ort		45.0	45.21	49·4 - -0. 2 18	51.92	10.6	28.48	16.5 +0.090

1.0	893) y (Cephei.	894) ω ³	Aquarii.	895) 41 H	. Cephei.	896) Lac.	δ Sculpt.
1913	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	23 ^h 35 ^m	77° 8′	23 ^h 38 ^m	15° 1′	23 ^h 43 ^m	67° 19′	23 ^h 44 ^m	28° 36′
Jan. o	41.88 86	65.6	12.39	41.7	42.28	40.6	23.61	53.3
10	41.02 81	64.7	12.30 8	42.0	41.83	39.8	23.49	53.3
20	40.21 71	63.4	12.22	42.I =	41.41 37	38.4	23.39 8	52.9
30	39.50 60	OTE	12.15	41.9	41.04 32	36.5	23.31 ₆	52.2
Febr. 9	38.90 45	59.1	12.11	41.6	40.72	34.2	23.25	51.2
19	38.45	56.5 30	12.09 -	41.1 8	40.48	31.6	23.22	49.9
März 1	38.16	53.5 30	12.10	40.3 ₁₀	40.33	28.8	23.22	48.3
11	38.05 = 9	50.5	12.14	39.3	40.28 6	25.9	23.25 8	46.5
21	38.14	47.2	12.22	37.9	40.34	22.7	23.33	44.3
31	38.42	44.3	12.33	36.4	40.51	20.0	23.44	42.0
April 10	38.87 62	41.8	12.49	34.7 18	40.79	17.6	23.59 20	39.6
20	39.49 75	39.5	12.68	32.9 21	41.10	15.6 16	23.79 ₂₃	37.2 26
30 N	40.24 87	37.7	12.90	30.8	41.02	14.0	24.02	34.6
Mai 10	41.11 96	36.5 8	13.17	28.7 22 26.5	42.15 50	12.9 6	24.29 30	32.1
20	42.07	35.7	13.45	20.5	42.74 63	12.3	24.59	29.6
30	43.09 104	35.6 -	13.76	24.3	43.37 64	12.3 6	24.91 25.26 35	27.2
Juni 9	44.13	36.1	14.09 33	22.2	44.01 66	12.9	25.40	24.9
19	45.18	37.I	14.42 23	20.1	44.67 64	14.1	25.01 36	22.9
Juli 9	46.18	38.6	14.75 32	18.1	45.31 61	15.7	25.97 35	21.2
Juli 9	47.13	40.7	15.07	15	45.92	17.8	26.32 33	19.7
19	48.00	43.2	15.38	14.9	46.48	20.4	26.65	18.6
29	48.77 66	46.1	15.66	13.6	40.99	23.3	26.95	17.9
Λ ug. 8	49.43	49.3	15.90	12.7 6	47.43 36	26.5	27.22	17.5
18 28	49.96 40	52.8 37	16.11	12.1	47.79 28	30.0 36	27.45 18	17.6
	50.36	56.5 38	16.29	11.7	48.07	33.6 37	27.63	17.9
Sept. 7	50.60	60.3	16.42 8	11.7	48.27	37.3	27.78	18.6
17	50.70	64.2 28	16.50	11.9	48.39	41.0	27.88	19.6
01-4	50.00	68.0 37	16.55	12.3	48.42	44.0	27.93	20.8
Okt. 7	50.47 33	71.7 35	16.56	13.0	48.36	48.2 33	27.94 2	22.2
17	50.14	75.2 32	16.54	13.8	48.22	51.5 30	27.92 6	23.7
27	49.69	78.4 29	16.49 8	14.7	48.02 28	54.5 26	27.86	25.2
Nov. 6	49.12	81.3	16.41	15.6	47.74 33	57.I ₂₃	27.77	20.0
16	48.44 76	83.7	16.32	16.5	47.41 38	59.4	27.66	27.9
1)00 6	47.08 82	85.7	16.22	17.4 8	47.03	01.1	27.54	29.1
Dez. 6	46.85 87	87.1	16.12	18.2	46.61	62.4	27.41	30.0
16	45.98	87.8	16.01	18.9	46.16	63.0 _I	27.28	30.7
26	45.09 88	88.0 -	15.91	19.4	45.71 46	63.T 6	27.15	31.1
36	44.21	87.5	15.80	19.8	45.25	62.5	27.03	31.2
Mittl. Ort	46.03	48.3	12.71	33.7	44.54	24.2	23.76	41.4
sec o, tg o		-1-4.382		0.268		1 2.393	1.139	-0.545

	898) φ l	Pegasi.	902) ω P	iscium.	903) E T	acanae.
1913	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl.
	23 ^h 48 ^m	18° 38′	23 ^h 54 ^m	6° 22'	23 ^h 55 ^m	66° 3′
Jan. o	2.99	17.2	50,14	53.8	24.70	60.2
10	2.89	16.3 9	50.05	53.I 7	24.21	59.0 17
20	2 .79 9	15.3 12	49.96	52.3 7	23.96 35	57.3 21
30	2.70 6	14.1	49.88	51.6 7	23.65	55.2 26
Febr. 9	2 .64	12.9	49.82	50.9	23.42	52.6
19	2.60	11.7	49.79	50.2	23.22	49.7
März i	2.50	10.6	40 00 -	40.8	23.11	46.4 33
11	2.61	9.6	40.70	40.6	23.07	43.0 34
21	17 2.68 7	8.7	49.86	10.5	19 22.T2 5	30.0
31	2.78	8.2 5	49.95	49.7	23.25	35·3 ³⁷
April 10	15	3	14	5	22	37
-	2.93 18	7.9	50.09 18	50.2	23.47 30	31.6
20	3 11 23	8.0	50.27	50.9 11	23.77	28.0 34
Mai 10	3.34 27	8.5 8	50.48	52.0	24.14	24.0
20	3.61 29	9.3	50.73 27 51.00	53.3 15	24.58 51	21.4 ³² 18.5
20	3.90	10.4	30	54.8	25.09 56	10.5
30	4.2.1	11.9	51.30	56.6	25.65	16.0
Juni 9	4.54	13.0	51.62 33	58.5	20.24	14.0
19	4.87	15.6	51.95 32	60.6	26.87 62	12.4
29	5.21 34	17.7	52.27	62.7	27.50 62	11.3 6
Juli 9	5.53	20.0	52.59	64.9	28.13 60	10.7
19	5.84	22.4	52.89	67.0	28.72	10.7
29	6.11	2.1.7	53.17	60.0	20.20	11.2
Aug. 8	6.36 25	27.1	53.42	70.0	29.79	12.3
18	6.57	20.3	53.63 21	72.6	30.22 43	13.8
28	6.75	31.4	53.81	74.1	30.58	15.8
Sept. 7	6.88	20	14	13	30.84	18.1
17	6.98	33.4	53.95 to	75.4 11 76.5 8	31.00	2D
27	7.03 5	35.I 36.7	54.12 7		31.06	20.7
Okt. 7	$7.05 \frac{2}{3}$	38.1	54.15 3	77·3 6 77·9	31.02 4	23.4 ₂₈ 26.2
17	7.04	39.1	54.14	78.3	30.89	29.0
·	3	9	2	2	21	25
N 6	7.01	40.0	54.12	78.5	30.68	31.5
Nov. 6	0.94 8	40.6	54.07	78.5	30.40	33.8
16	6.86	40.9	54.00	78.3	30.05	35.7 15
Dez. 6	0.77	41.0	53.91	70.0	29.00	37.2
	6.66	40.9	53.82	77.6	29.25	38.1
16	6.55	40.5 6	53.72	77.0	28.82	$38.4 - \frac{3}{2}$
26	6.44	39.9	53.62	76.3 7	28.39 41	38.2
36	6.33	39.0	53.52	75.7	27.98	37.4
Mittl. Ort	3.59	13.3	50.57	53.9	24.12	40.2
sec ð, tg ð	1.055	+0.337	1.006	+0.112	2.464	-2.252

Allgemeine Präzession = 50".259

$$A = t - 0.02526 \sin 2 \odot$$

$$+ 0.00293 \sin (\odot + 81^{\circ} 47')$$

$$- 0.34213 \sin \Omega$$

$$+ 0.00409 \sin 2 \Omega$$

$$[A' = -0.00405 \sin 2 ((-163^{\circ} 40'))]$$

$$C = -20''.47 \cos \odot \cos \varepsilon$$

$$D = -20''.47 \sin \odot$$

$$a = 46''.0886 + 20''.0457 \sin \alpha \tan \delta$$

$$c = \cos \alpha \sec \delta$$

$$B = -0''.5519 \cos 2 \odot$$

$$- 0.0092 \cos (\odot + 281^{\circ} 26')$$

$$- 9.2100 \cos \Omega$$

$$+ 0.0895 \cos 2 \Omega$$

$$[B' = -0.0884 \cos 2 ((-163^{\circ} 40'))]$$

$$E = -0''.0031 \sin 2 \odot$$

$$- 0.0419 \sin \Omega$$

$$+ 0.0014 \sin 2 \Omega$$

$$a' = 20''.0457 \cos \alpha$$

$$b' = -\sin \alpha$$

$$c' = \tan \alpha \sin \delta$$

O = wahre Länge der Sonne

 $\Omega = \text{Länge des aufsteigenden Knotens der Mondbahn auf der Ekliptik}$

 $d' = \cos \alpha \sin \delta$

(= mittlere Länge des Mondes

m, m' = jährliche Eigenbewegung in AR. und Dekl.

t - Zeit seit Anfang des Jahres, in Teilen des Jahres ausgedrückt.

Scheinb. AR. = AR. 1913.0 + tm + Aa + Bb + Cc + Dd + E + [A'a + B'b]Scheinb. Dekl. = Dekl. 1913.0 + tm' + Aa' + Bb' + Cc' + Dd' + [A'a' + B'b']

Setzt man
$$f = 46$$
".0886 $A + E$ $h \sin H = C$ $g \cos G = 20$ ".0457 A $h \cos H = D$ $g \sin G = B$ $i = C \operatorname{tg} \varepsilon$ $[f' = 46$ ".0886 $A']$ $[g' \cos G' = 20$ ".0457 $A']$ $[g' \sin G' = B'],$

so wird

 $d = \sin \alpha \sec \delta$

Scheinb. AR. = AR. 1913.0+ $tm+f+g\sin(G+\alpha) \log \delta + h\sin(H+\alpha) \sec \delta + [f'+g'\sin(G'+\alpha) \log \delta]$ Scheinb. Dekl. = Dekl. 1913.0+ $tm+g\cos(G+\alpha) + h\cos(H+\alpha) \sin \delta + i\cos \delta + [g'\cos(G'+\alpha)]$

Korrektion für die tägliche Aberration, wenn Θ die Sternzeit, φ die Polhöhe ist:

 $\Delta \alpha = + \circ *.0213 \cos \varphi \cos (\Theta - \alpha) \sec \delta$ $\Delta \delta = + \circ ".320 \cos \varphi \sin (\Theta - \alpha) \sin \delta$.

Konstanten für die Sternzeitepochen 18^h 40^m des Normalmeridians oder 6^h 39^m Berlin,

ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

Datum in Mittl. Zo	eit		log. A	$\log B$	log. C	$\log D$	E
1913 Jan. (0.50	0.000	8.5591,	0.0201	05115	1.3045	0.00
, ,	0.50 0.47	0.000	7.3729	0.9301_n 0.9356_n	0.5115_n 0.8103_n	1.2838	0.00
	0.47 0.44	0.055	8.5898		0.0103_n 0.9763_n	1.2474	0.00
		0.055	8.8612	0.9436 _n	1.0855_n	1.1927	0.00
Febr.	0.4 2 9.39	0.109	9.0141	$0.953I_n$ 0.9628_n	1.1612_n	1.1144	0.00
	9.36		9.1167		1.2138,	1.0022	0.00
3.0	_	0.137	,	0.9717_n	- A	0.8320	0.00
	1.33		9.1922	0.9787 _n	1.2483 _n	_	
	1.31	0.191	9.2518	0.9832 _n	1.2678 _n	0.5242	0.00
	1.28	0.218	9.3020	0.9849_n	1.2737_n	9.2713_n	0.00
	1.25	0.246	9.3470	0.9835 _n	1.2665_n	0.5673_n	0.00
April 10	-	0.273	9.3896	0.9794 _n	1.2461 _n	0.8494 _n	0.00
20	0.20	0.300	9.4314	0.9731_{n}	1.2114_n	1.0096 _n	0.00
	0.17	0.328	9.4730	0.9651 _n	1.1601 _n	1.1161 _n	0.00
Mai 10	0.14	0.355	9.5147	0.9564 _n	1.0878 _n	1.1910 _n	0.00
20	.12	0.382	9.5560	0.9480 _n	0.9864 _n	1.2439_n	0.00
	0.09	0.410	9.5965	0.9408,	0.8377_n	1.2798 _n	0.00
Juni 9	0.06	0.437	9.6353	0.9357n	0.5898,	1.3016,	0.00
19).04	0.464	9.6719	0.9334,,	9.9003,	1.3107,	0.00
20	10.0	0.491	9.7059	0.9340,	0.3648	1.3078,	0.00
Juli 8	3.98	0.519	9.7369	0.9375n	0.7294	1.2927_n	0.00
18	3.95	0.546	9.7647	0.9434,,	0.9171	1.2644 _n	0,00
	.93	0.573	9.7893	0.9511	1.0390	1.2211,	0.00
Aug. 7	7.90	0.601	9.8108	0.9595,	1.1245	1.1593	-+0.01
	.87	0.628	9.8296	0.9677_n	1.1857	1.0723,	0.01
27	.84	0.655	9.8459	0.9748	1.2287	0.9471 _n	0.01
Sept. 6	.82	0.683	9.8604	0.9800,	1.2566	0.7507n	+0.01
	.79	0.710	9.8736	0.9827,	1.2711	0.3488	0.00
	.76	0.737	9.8860	0.9827,	1.2729	0.0967	0.00
Okt. 6	.73	0.765	9.8983	0.9797,	1.2618	0.6734	0.00
	.71	0.792	9.9110	0.9740_{n}	1.2371	0.9063	0.00
26	.68	0.819	9.9245	0.9660,,	1.1967	1.0486	0.00
	.65	0.846	9.9390	0.9566_n	1.1371	1.1457	0.00
_	.63	0.874	9.9545	0.9360_n 0.9467_n	1.0518	1.2142	0.00
-	.60	0.901	9.9710	0.9374,	0.9277	1.2618	0.00
* `	.57	0.928	9.9879	0.9374_n 0.9299_n	0.7317	1.2924	-1-0.01
_	.54	0.956	0.0050		0,3306	1.3083	-1-0.0I
		0.983	-	0.9252,	55	9 9	0.01
	.52	, ,	0.0217	0.9239,	0.0729 _n	1.3103	
35	.49	010.1	0.0377	0.9261 _n	0.6505 _n	1.2984	0.01

Konstanten für die mittleren Tage 1913, ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 ^h Mittl. Zeit	f	$\log g$	G	log. h	11	$\log. i$	C
Jan. o	-r.67	0.9316	265° 7	T ATOY		0-	
I				1.3101	350 51	0.1489 _n	550
2	1.49 1.31	0.9317	265 39 266 II	1.3099	349 55	0.1907 _n	587
3	1.13	0.9319	266 43	1.3096	348 58	0. 22 87 _n	623
3 4	0.95	0.9321	267 14	1.3094	348 2	0.2636 _n	660
	0.93	0.9324		1.3091	347 5	0.2957_n	697
5	-0.77	0.9328	267 45	1.3088	346 8	0.3255 _n	733
6	0.59	0.9332	268 17	1.3085	345 12	0.3533_n	770
7	0.42	0.9337	268 48	1.3081	344 15	0.3793_n	806
8	0.24	0.9343	269 19	1.3077	343 18	0.4036	843
9	-0.07	0.9349	269 49	1.3074	342 21	0.4265 _n	880
10	+0.11	0.9356	270 20	1.3070	341 24	0.4481,	916
11	0.28	0.9363	270 50	1.3066	340 26	0.4686,	953
12	0.46	0.9371	271 20	1.3062	339 29	0.4881	989
13	0.63	0.9380	271 49	1.3057	338 32	0.5066	026
14	0.80	0.9389	272 18	1.3052	337 34	0.5241,	063
15	+0.97	0.9399	272 47	1.3048	336 36	0.5409 _n	
16	1.14	0.9409	273 16	1.3043			099
17	1.31	0.9420	273 44	1.3038	335 39 334 41	0.5569 _n 0.5722 _n	136 172
18	1.47	0.9431	274 12	1.3032	333 43	0.5722_n 0.5868_n	
19	1.64	0.9442	274 39	1.3027	332 45	0.5000_n 0.6008_n	209 246
20	1 7 00						
20 21	+1.80	0.9454	275 6	1.3022	331 46	0.6143 _n	282
	1.96	0.9466	275 33	1.3016	330 48	0.6272,	319
22	2.12	0.9479	² 75 59	1.3010	3 2 9 49	0.6396 _n	355
23	1	0.9492	276 25	1.3004	328 51	0.6515 _n	392
24	2.44	0.9505	276 50	1.2998	327 52	0.6630 _n	429
25	-1-2.60	0.9518	277 15	1.2992	326 53	0.6741,	465
26	2.75	0.9532	277 40	1.2986	325 53	0.6847_n	502
27	2.81	0.9546	278 4	1.2980	324 54	0.6949	538
28	3.06	0.9560	278 28	1.2974	323 55	0.7048	575
29	3.21	0.9574	278 52	1.2968	322 55	0.7143_n	612
30	+3.36	0.9589	279 15	1.2961	321 55	0.7235 _n	648
31	3.51	0.9603	279 38	1.2955	320 55	0.7323_{n}	685
Febr. 1	3.66	0.9618	280 0	1.2948	319 55	0.7409_n	721
2	3.80	0.9633	280 22	1.2942	318 55	0.7491_n	758
3	3.94	0.9648	280 43	1.2935	317 54	0.7570 _n	795
4	+4.09	0.9663	281 4	1.2928		0.7647 _n	
5	4.23	0.9678	281 25	1.2928		0.7047_n 0.7721_n	831 868
6	4.37	0.9693	281 46	1.2922	315 53 314 52	0.7721_n 0.7793_n	
	. 57	7 73	13	-1-9-3	3*4 34	5.7793n	904

Konstanten für die mittleren Tage 1913, ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 ^h Mittl. Zeit	f	$\log g$	G	log. h	П	log. i	C
Febr. 6	+4.37	0.9693	281 46	1.2915	314 52	0.7793_n	904
7	4.50	0.9708	282 6	1.2909	313 51	0.7862_{n}	941
8	4.64	0.9723	282 26	1.2902	312 50	0.7928_{n}^{n}	978
9	4.78	0.9738	282 45	1.2895	311 48	0.7992,	014
10	4.91	0.9753	283 4	1.2889	310 47	0.8054,	051
11	+5.04	0.9768	283 23	1.2882	309 45	0.8113 _n	087
12	5.17	0.9783	283 41	1.2876	308 43	0.8171,	124
13	5.30	0.9797	283 59	1.2869	307 41	0.8226	161
14	5.43	0.9812	284 17	1.2863	306 39	0.8279_n^n	197
15	5.55	0.9826	284 34	1.2857	305 36	0.8331_{n}	234
16	4-5.68	0.9840	284 51	1.2850	304 34	0.8380,	270
17	5.80	0.9854	285 7	1.2844	303 31	0.8427	307
18	5.92	0.9868	285 24	1.2838	302 28	0.8473_n	344
19	6.04	0.9882	285 40	1.2832	301 25	0.8517 _n	380
20	6.16	0.9896	285 56	1.2827	300 22	0.8559_n	417
21	+6.28	0.9910	286 12	1.2821	299 19	0.8599 _n	453
22	6.40	0.9923	286 28	1.2815	298 15	0.8637 _n	490
23	6.52	0.9936	286 43	1.2810	297 12	0.8674 _n	527
24	6.63	0.9949	286 58	1.2805	296 8	0.8709 _n	563
25	6.75	0.9962	287 13	1.2800	295 4	0.8742	600
26	-1-6.86	0.9975	287 28	1.2795	294 0	0.8774_{n}	636
27	6.97	0.9987	287 42	1.2790	292 56	0.8805,	673
28	7.08	0.9999	287 57	1.2785	291 52	0.8834_{n}	710
März 1	7.19	1.0011	288 11	1.2781	290 48	0.8861 _n	746
2	7.30	1.0023	288 25	1.2776	289 44	0.8887_{n}^{n}	783
3	+7.41	1.0034	288 39	1.2772	288 39	0.8911 _n	819
4	7.52	1.0045	288 53	1.2768	287 35	0.8934 _n	856
5	7.62	1.0056	289 7	1.2765	286 30	0.8955_n	893
6	7.73	1.0067	289 20	1.2761	285 26	0.8975_n	929
7	7.83	1.0077	289 34	1.2758	284 21	0.8993_n	966
8	- 1 -7.94	1.0087	289 47	1.2755	283 16	0.9010 _n	002
9	8.04	1.0097	290 I	1.2752	282 11	0.9026	39
IO	8.15	1.0107	290 14	1.2750	281 6	0.9040	076
11	8.25	1.0116	290 27	1.2747	280 I	0.9053	112
12	8.35	1.0125	290 40	1.2745	278 56	0.9065	149
13	+8.45	1.0134	290 53	1.2743	277 51	0.9075 _n	186
14	8.55	1.0143	291 6	1.2742	276 46	0.9084	222
15	8.66	1.0151	291 20	1.2740	275 41	0.9091	259
				, ,	, ,	"	

REDUKTIONSTAFELN.

Konstanten für die mittleren Tage 1913, ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 ^h Mittl. Zeit	f	$\log g$	G	log. h	II	$\log.~i$	(
März 15	+ 8.66	1.0151	291°20	1.2740	275°41	0.9091,	259
16	8.76	1.0159	291 33	1.2739	274 36	0.9098,	295
17	8.86	1.0167	291 46	1.2738	273 31	0.9103_n	332
18	8.96	1.0175	- '	1.2738	272 26	0.9105_n	369
19	9.06	1.01/3	291 59 292 12	1.2737	271 22	0.9100_n 0.9109_n	405
1							_
20	+ 9.16	1.0190	292 25	1.2737	270 17	0.9110,	442
21	9.26	1.0197	292 38	1.2737	269 12	0.9109 _n	478
22	9.36	1.0204	292 51	1.2737	268 7	0.9108 _n	515
23	9.46	1.0211	293 5	1.2738	2 67 2	0.9105 _n	552
24	9.56	1.0218	293 18	1.2739	2 65 57	0.9101,	588
25	+ 9.66	1.0224	293 32	1.2740	264 52	0.9095 _n	625
26	9.76	1.0230	293 46	1.2741	263 48	0.9088_n	661
27	9.86	1.0236	293 59	1.2742	262 43	0.9080 _n	698
28	9.96	1.0242	294 13	1.2744	261 39	0.9071,	735
29	10.06	1.0248	294 26	1.2746	260 35	0.9060 _n	771
30	+10.17	1.0254	294 40	1.2748	259 30	0.9048	808
31	10.27	1.0259	294 54	1.2751	258 26	0.9035n	844
April 1	10.38	1.0264	295 9	1.2753	257 22	0.9020	881
2,	10.48	1.0269	295 23	1.2756	256 18	0.9004 _n	918
3	10.58	1.0274	295 37	1.2759	255 14	0.8986 _n	954
4	10.69	1.0279	295 52	1.2762	254 11	0.8968 _n	991
5	10.79	1.0284	296 6	1.2766	253 7	0.8948,,	027
6	10.90	1.0289	296 21	1.2770	252 4	0.8926_n	064
7	11.01	1.0294	296 36	1.2774	251 0	0.8903_n	101
8	11.11	1.0299	296 51	1.2778	249 57	0.8879_n	137
9	+11.22	1.0304	297 6	1.2782	248 54	0.8853 _n	174
10	11.33	1.0308	297 21	1.2786	2.17 52	0.8826	210
11	11.44	1.0313	297 36	1.2791	246 49	0.8798_{n}	247
12	11.55	1.0317	297 52	1.2796	245 47	0.8768,	284
13	11.66	1.0322	298 7	1.2800	244 44	0.8737_n	320
14	+11.78	1.0326	298 23	1.2805	243 42	0.8704,	357
15	11.89	1.0331	298 39	1.2810	242 40	0.8669	393
т6	12.01	1.0335	298 55	1.2816	241 38	0.8633"	430
17	12.12	1.0340	299 12	1.2821	240 37	0.8596_n	467
18	12.24	1.0344	299 28	1.2827	239 35	0.8557_n	503
19	+12.36	1.0349	299 45	1.2832	238 34	0.8516,	540
20	12.48	1.0354	300 2	1.2838	237 33	0.8474_{n}	576
	12.60	1.0359	300 19	1.2844	236 33	0.8430,	613

Konstanten für die mittleren Tage 1913, ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 Mittl.		ſ	\log_{-g}	G	log. h	II Ribl. Ja	log. i	C
				2.5			7.	
A pri	21	-1-12.60	1.0359	300 19	1.2844	236 33	$\circ .843\circ _{n}$	613
	22	12.72	1.0364	300 36	1.2850	235 32	0.8384_n	650
	23	12.84	1.0369	300 53	1.2856	234 32	0.8337_n	686
	24	12.97	1.0374	301 10	1.2862	233 31	0.8288_{n}	723
	25	13.09	1.0379	301 28	1.2868	232 31	0.8237_n	759
	26	+-13.22	1.0385	301 45	1.2874	231 32	0.8184,,	796
	2 7	13.35	1.0391	302 3	1.2880	230 32	0.8129_n	833
	28	13.48	1.0397	302 21	1.2887	229 33	0.8073,	869
	29	13.61	1.0403	302 39	1.2893	228 33	0.8014_{n}	906
	30	13.74	1.0409	302 57	1.2899	227 34	0.7953n	942
Mai	1	+13.87	1.0416	303 15	1.2906	226 36	0.7891 _n	979
	2	14.01	1.0423	303 34	1.2912	225 37	0.7826_{n}	016
	3	14.14	1.0430	303 52	1.2918	224 39	0.7759,,	052
	4	14.28	1.0437	304 11	1.2925	223 41	0.7689 _n	089
	5	14.42	1.0444	304 29	1.2931	222 43	0.7618 _n	125
	6	-1-14.56	1.0452	304 48	1.2937	221 45	0.7544 _n	162
	7	14.70	1.0460	305 7	1.2943	220 47	0.7467_n	199
	8	14.84	1.0468	305 26	1.2950	219 50	0.7388,	235
	9	14.98	1.0476	305 45	1.2956	218 52	0.7306,	272
	10	15.13	1.0485	306 4	1.2962	217 55	0.7221,	308
	11	-+15.27	1.0493	306 23	1.2968	216 59	0.7133_n	345
	12	15.42	1.0502	306 42	1.2974	216 2	0.7043,	382
	13	15.57	1.0511	307 I	1.2980	215 5	0.6949,	418
	1.1	15.72	1.0521	307 20	1.2986	214 9	0.6852_n	455
	15	15.87	1.0531	307 39	1.2992	213 13	0.6751 _n	491
	16	+16.02	1.0542	307 58	1.2997	212 17	0.6647n	528
	17	16.17	1.0553	308 17	1.3002	211 21	0.6539_n	565
	18	16.33	1.0564	308 36	1.3008	210 26	0.6427 _n	601
	19	16.48	1.0575	308 55	1.3014	209 30	0.6311,	638
	20	16.64	1.0587	309 14	1.3019	208 35	0.6191 _n	674
	21	+16.80	1.0599	309 33	1.3025	207 40	0.6065 _n	711
	22	16.96	1.0611	309 52	1.3030	206 45	0.5935 _n	748
	23	17.12	1.0623	310 11	1.3035	205 50	0.5800,	784
	24	17.28	1.0636	310 30	1.3040	204 55	0.5659 _n	821
	25	17.44	1.0649	310 48	1.3045	204 I	0.5513,,	857
	26	+17.61	1.0662	311 7	1.3049	203 6	0.5359n	894
	27	17.77	1.0676	311 25	1.3053	202 12	0.5200,	931
	28	17.93	1.0690	311 44	1.3058	201 18	0.5033"	967
			1			1		1

Konstanten für die mittleren Tage 1913,

ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation. 12h Glog. h IIlog. i (($\log g$ ſ Mittl. Zeit 311 44 201 18 Mai 28 +17.93 1.0690 1.3058 967 0.5033, 29 18.10 1.0704 1.3062 0.4857 004 312 2 200 24 30 18.27 1.0718 312 20 1.3066 199 30 0.4673, 040 31 18.43 1.0733 312 38 1.3070 198 36 0.4480, 077 Juni 18.60 1.0748 Ι 312 56 1.3074 197 42 0.4277, 114 +18.77196 49 2 1.0763 1.3077 0.4063, 150 313 14 18.94 1.0778 0.3836, 187 1.3081 3 313 32 195 55 195 4 19.11 1.0794 313 49 1.3084 2 0.3595, 223 5 19.29 1.0810 1.3087 260 314 194 9 0.3340 7 6 19.46 1.0826 314 24 1.3090 193 15 0.3067_n 297 +19.63 1.0843 7 314 41 1.3093 192 22 0.2774_{n} 333 8 1.0860 19.80 191 29 0.2459 314 57 1.3095 370 19.98 1,0878 0.2118. 406 315 14 190 36 9 1.3097 1.0895 10 20.15 315 30 1.3100 189 43 0.1747 443 1.0913 188 50 480 11 20.33 315 46 1.3102 0.1340, 187 58 0.0890, 516 12 +20.50 1.0931 316 2 1.3103 0.0386, 20.68 1.0949 316 18 1.3105 187 5 553 13 186 12 20.85 1.0967 316 34 1.3106 9.9815, 589 14 1.3108 185 20 9.9156, 626 1.0985 316 49 15 21.03 9.8377_n 184 27 663 16 21.21 1.1003 317 1.3109 4 17 -1-21.38 I.1022 317 18 1.3110 183 34 9.7426, 699 9.6206, 736 18 21.56 1.1041 317 33 1.3110 182 42 181 49 19 21.74 1.1060 317 47 1.3111 9.4501, 772 1.1079 318 180 57 9.1652, 809 20 21.92 I 1.3111 180 846 2 I 22.09 1.1098318 15 1.3111 4 8.0294 882 22 1-22.27 1.1117 318 28 1.3111 179 12 9.0969 178 19 9.4160 919 23 22.45 1.1137 318 42 1.3111 22.62 1.1156 318 55 1.3110 177 27 9.5977 24 955 22.80 8 1.1176 319 1.3110 176 34 9.7254 992 25 26 22.97 1.1196 319 20 1.3109 175 42 9.8239 029 27 +23.15 **T.12**16 1.3108 174 49 9.9040 065 319 33 28 1.1236 9.9715 102 23.33 319 45 1.3107 173 57 0.0298 138 23.50 1.1256 29 319 57 1.3105 173 4 23.68 1.1276 320 8 0.0811 30 1.3104 172 11 175 Juli 1 23.85 1.1296 320 20 1.3102 171 19 0.1268 212 1.1316 170 26 0.1681248 1-24.03 1.3100 2 320 3I 0.2057 285 1.1336 169 33 24.20 320 42 1.3098 3 1.1356 1.3096 168 40 321 24.38 320 53 0.2402 4

Konstanten für die mittleren Tage 1913, ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 Mittl.		f	$\log_{\bullet}g$	G	log. h	Н	$\log.i$	(
Juli	4	-+ 24.38	1.1356	320° 53	1.3096	168"40	0.2402	321
e ma	5		1.1356	320 55	1.3093	167 47	0.2720	358
	6	24.55 24.72	1.1396	321 14	1.3093	166 54	0.3015	395
	7	24.90	1.1390	321 14	1.3090	166 I	0.3290	393 431
	8	25.07	1.1436	321 24	1.3084	165 8	0.3548	468
	Ü		1.1450	341 33		105 0	0.5540	
	9	+25.24	1.1456	321 43	1.3081	164 15	0.3791	504
	10	25.41	1.1476	321 52	1.3078	163 22	0.4019	541
	II	25.58	1.1496	322 I	1.3074	162 29	0.4235	578
	12	25.75	1.1516	322 10	1.3070	161 35	0.4440	614
	13	25.91	1.1536	322 18	1.3067	160 42	0.4634	651
	14	+26.08	1.1556	322 27	1.3063	159 48	0.4818	687
	15	26.25	1.1575	322 35	1.3059	158 54	0.4994	724
	16	26.41	1.1595	322 43	1.3055	158 0	0.5162	761
	17	26.57	1.1614	322 51	1.3050	157 6	0.5323	797
	18	26.74	1.1633	322 58	1.3046	156 12	0.5477	834
	19	+26.90	1.1652	323 5	1.3041	155 18	0.5624	870
	20	27.06	1.1671	323 12	1.3036	154 24	0.5765	907
	21	27.22	1.1690	323 19	1.3031	153 29	0.5901	944
	22	27.38	1.1709	323 26	1.3026	152 35	0.6032	980
	23	2 7.54	1.1728	323 33	1.3021	151 40	0.6157	017
	24	+27.69	1.1747	323 39	1.3016	150 45	0.6278	053
	25	27.85	1.1765	3 ² 3 45	1.3010	149 50	0.6395	090
	26	28.00	1.1784	323 51	1.3005	148 55	0.6507	127
	27	28.16	1.1802	323 57	1.2999	148 0	0.6615	163
	28	28.31	1.1820	324 3	1.2994	147 4	0.6720	200
	29	+28.46	1.1838	324 8	1.2988	146 8	0.6820	236
	30	28.61	1.1856	324 14	1.2982	145 13	0.6918	273
	31	28.76	1.1874	324 19	1.2976	144 17	0.7012	310
Aug.		28.90	1.1892	324 24	1.2970	143 21	0.7103	346
	2	29.05	1.1909	324 2 9	1.2964	142 24	0.7191	383
	3	-1-29.19	1.1926	324 34	1.2958	141 28	0.7276	419
	4	29.34	1.1943	324 39	1.2952	140 31	0.7358	456
	5	29.48	1.1960	324 44	1.2946	139 34	0.7437	493
	6	29.62	1.1976	324 48	1.2940	138 37	0.7514	529
	7	29.76	1.1993	324 53	1.2933	137 40	0.7589	566
	8	+29.90	1.2009	324 57	1.2927	136 43	0.7661	602
	9	30.04	1.2025	325 I	1.2921	135 45	0.7730	639
	10	30.17	1.2041	325 6	1.2915	134 48	0.7798	676
		,				J, T-	117	! '

Konstanten für die mittleren Tage 1913,

ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 ^h Mittl. Zeit	f	$\log_{\epsilon} g$	G	log. h	II	log. i	((
Aug. 10	+30.17	1.2041	325° 6′	1.2915	134°48	0.7798	676
, II	30.31	1.2057	325 10	1.2908	133 50	0.7863	712
12	30.44	1.2072	325 14	1.2902	132 52	0.7926	749
13	30.57	1.2088	325 18	1.2896	131 53	0.7987	785
14	30.70	1.2103	325 22	1.2890	130 55	0.8046	822
15	-1 30.83	1.2118	325 25	1.2883	129 56	0.8103	859
16	30.96	1.2133	325 29	1.2877	128 57	0.8158	895
17	31.09	1.2148	325 32	1.2871	127 58	0.8211	932
18	31.21	1.2162	325 36	1.2865	126 59	0.8262	968
19	31.34	1.2176	325 39	1.2859	126 0	0.8312	005
20	+31.46	1.2190	325 43	1.2853	125 0	0.8359	042
21	31.58	1.2204	325 46	1.2847	124 0	0.8405	678
22	31.70	1.2217	325 50	1.2841	123 0	0.8450	115
23	31.82	1.2230	325 53	1.2836	122 0	0.8493	151
24	31.94	1.2244	325 57	1.2830	121 0	0.8534	188
25	-1-32.06	1.2257	326 o	1.2825	119 59	0.8573	225
26	32.17	1.2270	326 4	1.2819	118 58	0.8611	261
27	32.29	1.2283	326 7	1.2814	117 57	0.8648	298
28	32.40	1.2295	326 10	1.2809	116 56	0.8683	334
29	32.52	1.2308	326 13	1.2804	115 55	0.8716	371
30	-1-32.63	1.2320	326 17	1.2799	114 54	0.8748	408
31	32.74	1.2332	326 20	1.2794	113 52	0.8779	444
Sept. 1	32.85	1.2344	326 24	1.2789	112 50	0.8808	481
2	32.96	1.2356	326 27	1.2785	111 48	0.8835	517
3	33.07	1.2367	326 31	1.2781	110 46	0.8861	554
4	+33.18	1.2378	326 34	1.2776	109 44	0.8886	591
5	33.29	1.2389	326 37	1.2772	108 42	0.8910	627
6	33-39	1.2400	326 40	1.2768	107 39	0.8932	664
7	33.50	1.2411	326 44	1.2765	106 37	0.8953	700
8	33.60	1.2422	326 47	1.2762	105 34	0.8972	737
9	-F 33.71	1.2432	326 51	1.2758	104 31	0.8990	774
IO	33.81	1.2442	326 55	1.2755	103 28	0.9007	810
11	33.92	1.2452	326 58	1.2753	102 25	0.9023	847
12	34.02	1.2.462	327 2	1.2751	101 22	0.9037	884
13	34.12	1.2472	327 6	1.2748	100 18	0.9050	920
14	+34.22	1.2482	327 10	1.2746	99 15	0.9062	957
15	34.32	1.2492	327 14	1.2744	98 11	0.9072	993
16	34.42	1.2502	327 18	1.2742	97 8	0.9081	030

Konstanten für die mittleren Tage 1913, ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 ^h Mittl. Zeit	ŗ	$\log. g$	G	log. h	II	log. i	C
Sept. 16	- + 34.42	1.2502	327° 18′	1.2742	97° 8′	0.9081	030
17	34.53	1.2511	327 23	1.2741	96 4	0.9089	067
18	34.63	1.2520	327 27	1.2739	95 0	0.9096	103
19	34.73	1.2529	327 31	1.2738	93 56	0.9101	140
20	34.83	1.2538	327 36	1.2738	92 52	0.9105	176
2 I.	+34.93	1.2547	327 40	1.2737	91 48	0.9108	213
22	35.03	1.2556	3 2 7 45	1.2737	90 44	0.9109	250
23	35.13	1.2565	327 49	1.2737	89 40	0.9109	286
2.1	35.23	1.2574	327 54	1.2737	88 36	0.9108	323
25	35.33	1.2582	327 58	1.2738	87 32	0.9106	359
26	+35.43	1.2591	328 3	1.2738	86 28	0.9102	396
27	35.53	1.2599	3 2 8 8	1.2739	85 24	0.9098	433
28	35.63	1.2607	328 13	1.2740	84 20	0.9092	469
29	35.73	1.2616	328 18	1.2742	83 16	0.9084	506
30	35.83	1.2624	328 23	1.2743	82 11	0.9075	542
Okt. 1	+-35.93	1.2632	328 29	1.2745	81 7	0.9065	579
2	36.03	1.2640	328 34	1.2747	80 3	0.9054	616
3	36.14	1.2648	328 40	1.2749	78 59	0.9041	652
4	36.24	1.2656	328 45	1.2752	77 55	0.9027	689
5	36.34	1.2664	328 51	1.2755	76 51	0.9012	725
6	+36.45	1.2672	328 57	1.2758	75 47	0.8995	762
7	36.55	1.2680	329 3	1.276r	74 43	0.8977	799
8	36.66	1.2688	329 9	1.2764	73 39	0.8958	835
9	36.76	1.2696	3 2 9 15	1.2768	72 36	0.8937	872
10	36.87	1.2704	329 21	1.2772	71 32	0.8915	908
11	+ 36.98	1.2712	329 27	1.2776	70 28	0.8891	945
12	37.09	1.2720	329 33	1.2780	69 25	0.8866	982
13	37.20	1.2728	329 40	1.2784	68 21	0.8839	018
14	37.31	1.2736	329 47	1.2789	67 18	0.8811	୍ର5
15	37.42	1.2744	329 53	1.2793	66 15	0.8781	091
16	+37.53	1.2752	330 0	1.2798	65 11	0.8750	128
17	37.65	1.2760	330 7	1.2803	64 8	0.8718	165
18	37.76	1.2769	330 14	1.2808	63 5	0.8683	201
19	37.88	1.2777	330 21	1.2814	62 3	0.8647	238
20	38.00	1.2785	330 28	1.2819	61 0	0.8610	274
21	+ 38.12	1.2793	330 35	1.2825	59 57	0.8571	311
22	38.23	1.2801	330 43	1.2831	58 55	0.8530	348
23	38.35	1.2810	330 50	1.2836	57 53	0.8487	384

Konstanten für die mittleren Tage 1913, ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 ^h Mittl. Zeit	ſ	$\log g$	G	log. h	H	log. i	((
Okt. 23	+38.35	1.2810	330° 50	1.2836	57° 53′	0.8487	384
24	38.47	1.2818	330 58	1.2842	56 50	0.8443	421
25	38.59	1.2827	331 5	1.2848	55 48	0.8397	457
2 6	38.72	1.2836	331 13	1.2854	54 46	0.8349	494
27	38.84	1.2844	331 21	1.2860	53 45	0.8299	531
28	+38.97	1.2853	331 29	1.2867	52 43	0.8247	567
29	39.10	1.2862	331 36	1.2873	51 42	0.8193	604
30	39.23	1.2871	331 44	1.2880	50 40	0.8137	640
3 r	39.36	1.2880	331 52	1.2886	49 39	0.8079	677
Nov. 1	39.49	1.2889	332 0	1.2892	48 38	0.8019	714
2	-1-39.62	1.2899	332 8	1.2899	47 37	0.7956	750
3	39.76	1.2908	332 16	1.2905	46 36	0.7891	787
4	39.89	1.2918	332 24	1.2912	45 36	0.7824	823
5	40.03	1.2928	332 32	1.2919	44 35	0.7755	860
6	40.17	1.2937	332 40	1.2925	43 35	0.7683	897
7	-1-40.31	1.2947	332 48	1.2932	42 35	0.7608	933
8	40.45	1.2957	332 56	1.2938	41 35	0.7531	970
9	40.60	1.2968	333 4	1.2945	40 35	0.7450	006
10	40.74	1.2978	333 12	1.2951	39 35	0.7367	043
11	40.89	1.2988	333 20	1.2958	38 36	0.7281	08 0
12	+41.04	1.2999	333 28	1.2964	37 36	0.7192	116
13	41.19	1.3009	333 37	1.2970	36 37	0.7099	153
14	41.34	1.3020	333 45	1.2977	35 38	0.7003	189
15	41.49	1.3031	333 53	1.2983	34 39	0.6904	226
16	41.65	1.3042	334 I	1.2989	33 40	0.6800	263
17	-+-41.80	1.3053	334 9	1.2995	32 42	0.6693	299
18	41.96	1.3065	334 17	1.3001	31 43	0.6582	336
19	42.12	1.3076	334 25	1.3007	30 45	0.6466	372
20	42.28	1.3088	334 33	1.3013	29 47	0.6345	409
21	42.44	1.3100	334 41	1.3018	28 48	0.6220	446
22	+42.60	1.3112	334 49	1.3024	27 50	0.6090	482
23	42.76	1.3124	334 56	1.3029	26 53	0.5954	519
24	42 93	1.3136	335 4	1.3035	25 55	0.5812	555
25	43.09	1.3148	335 12	1.3040	24 57	0.5664	592
26	43.26	1.3161	335 20	1.3045	24 0	0.5509	629
27	+43.43	1.3173	335 27	1.3049	23 2	0.5347	665
28	43.60	1.3186	335 35	1.3054	22 5	0.5178	702
29	43.77	1.3198	335 42	1.3059	21 8	0.5000	738

Konstanten für die mittleren Tage 1913, ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

12 ^h Mittl. Zeit	f	$\log_{e}g$	G	log. h	II	$\log.~i$	C
Nov. 29	- 1 -43-77	1.3198	335 42	1.3059	21 8	0.5000	738
30	43.94	1.3211	335 50	1.3063	20 11	0.4813	775
Dez. I	44.12	1.3224	335 57	1.3067	19 14	0.4616	812
2	44.29	1.3237	336 4	1.3071	18 17	0.4408	848
3	44.47	1.3250	336 11	1.3075	17 20	0.4189	885
4	-1-44.64	1.3263	336 18	1.3079	16 23	0.3956	921
5	44.82	1.3276	336 24	1.3082	15 26	0.3708	958
6	44.99	1.3290	336 31	1.3086	14 30	0.3444	995
7	45.17	1.3303	336 38	1.3089	13 33	0.3161	031
8	45.35	1.3317	336 44	1.3092	12 37	0.2857	068
9	+-45-53	1.3331	336 51	1.3095	11 40	0.2528	104
10	45.71	1.3345	336 57	1.3097	10 44	0.2171	141
11	45.89	1.3359	337 3	1.3099	9 48	0.1780	178
12	46.07	1.3373	337 9	1.3101	8 52	0.1349	214
13	46.25	1.3387	337 15	1.3103	7 55	0.0870	251
14	+46.44	1.3401	337 21	1.3105	6 59	0.0328	287
15	46.62	1.3415	337 27	1.3107	6 3	9.9708	324
16	46.80	1.3429	337 32	1.3108	5 7	9.8982	361
17	46.99	1.3443	337 38	1.3109	4 11	9.8108	397
18	47.17	1.3457	337 43	1.3110	3 15	9.7011	434
19	+ 47-35	1.3471	337 48	1.3111	2 19	9.5536	470
20	47.53	1.3485	337 53	1.3111	1 23	9.3288	507
2.1	47.72	1.3499	337 58	1.3111	0 27	8.8351	544
22	47.90	1.3514	338 3	1.3111	359 30	8.8837_n	580
23	48.09	1.3528	338 8	1.3111	358 34	9.345° _n	617
24	+48.27	1.3542	338 12	1.3111	357 38	9.5636 _n	653
2 5	48.46	1.3557	338 17	1.3110	356 42	9.7083_n	690
26	48.64	1.3571	338 21	1.3109	355 46	9.8164 _n	727
27	48.83	1.3585	338 25	1.3108	354 50	9.9029_n	763
28	49.01	1.3600	338 29	1.3107	353 54	9.9748_{n}	800
29	+ 49.19	1.3614	338 33	1.3105	352 57	0.0365 _n	836
30	49.37	1.3628	338 37	1.3103	352 I	0.0903,	873
31	49.55	1.3642	338 41	1.3101	351 5	0.1380,	910
32	49.74	1.3656	338 44	1.3099	350 8	0.1809 _n	946
33	49.92	1.3670	338 48	1.3097	349 12	0.2198 _n	983
34	+-50.10	1.3684	338 51	1.3094	348 15	0.2554_n	019
35	50.28	1.3698	338 54	1.3092	347 19	$0.288 T_n$	056
36	50.45	1.3712	338 57	1.3089	346 22	0.3185_n	093
39	ر ۲۰۰۰ ر	16-	35 37	33	JT	J Jn	

Konstanten zur Berücksichtigung der Nutationsglieder von kurzer Periode für 1913.

C	$\log_* A'$	$\log B'$	f'	$\log. g'$	G'	(log. A'	$\log B^{e}$	f"	\log, g'	G'
000	6.577_n	8.946,	-0.02	8.948	265.1	350	7.481	8.436	+0.14	8.823	24.2
010	6.984_n	8.943_n	-0.04	8.953	257.6	360	7.508	8.219	+0.15	8.824	14.4
020	7.188_{n}	8.933_n	0.07	8.959	250.2	370	7.526	7.744	+0.16	8.829	4.7
030	7.323_{n}	8.915_n	-0.10	8.965	242.9	380	7.535	7.744_n	+0.16	8.839	355.4
040	$7.42I_{n}$	8.889 _n	O.I2	8.972	235.7	390	7.537	8.219_n	+0.16	8.851	346.5
050	7.496 _n	8.854 _n	-0.15	8.979	228.7	400	7.531	8.436 _n	+0.16	8.865	338.1
060	7.556_n	8.809_n	-0.17	8.985	221.8	410	7.517	8.576_n	+0.15	8.880	330.3
070	7.603_n	8.751,	-0.19	8.992	215.0	420	7.495	8.675_{n}	+0.14	8.895	322.9
080	7.640 _n	8.675_n	-0.20	8.998	208.4	430	7.464	8.751_{n}	+0.13	8.909	316.0
090	7.669_n	8.576_n	-0.22	9.004	201.9	440	7.423	8.809_n	+0.12	8.922	309.4
100	7.691 _n	8.436,	-0.23	9.009	195.5	450	7.369	8.854_n	+0.11	8.932	303.2
110	7.706 _n	8.219_n	-0.23	9.014	189.2	460	7.300	8.889_{n}	+0.09	8.940	297.3
120	7.716_{n}	7.744n	0.24	9.018	183.0	470	7.209	8.915_{n}	-+0.08	8.946	291.5
130	7.719_n	7.744	-0.24	9.021	177.0	480	7.086	8.933_n	0.06	8.950	285.9
140	7.717_{n}	8.219	-0.24	9.024	171.0	490	6.905	8.943_n	+0.04	8.950	280.4
150	7.709 _n	8.436	-0.24	9.026	165.1	500	6.577	8.946_{n}	+0.02	8.948	274.9
160	7.695_n	8.576	-0.23	9.026	159.2	510	5.695_n	8.943_n	0.00	8.943	269.3
170	7.675_n	8.675	0.22	9.025	153.4	520	6.672_{n}	8.933_n	0.02	8.935	263.7
180	7.648_{n}	8.751	-0.2 I	9.023	147.7	530	6.943_n	8.915_{n}	-0.04	8.925	257.9
190	7.614_n	8.809	-0.19	9.019	141.9	540	7.101_n	8.889_n	- 0.06	8.911	251.9
200	$7.57I_{n}$	8.854	-0.17	9.014	136.2	550	7.210 _n	8.854_{n}	-0.08	8.895	245.6
210	7.517_n	8.889	-0.15	9.008	130.4	560	7.289_n	8.809_n	-0.09	8.877	238.8
220	$7.45I_{n}$	8.915	0.13	8.999	124.6	570	7.348_{n}	8.751_{n}	-0.10	8.857	231.6
230	7.368_n	8.933	-0.11	8.989	118.6	580	7.392_{n}	8.675_n	-0.11	8.835	223.8
240	7.259_n	8.943	-0.08	8.978	112.5	590	7.424_n	8.576_n	-0.12	8.814	215.3
250	7.110,	8.946	-0.06	8.964	106.3	€00	7.445_{n}	8.436_{n}	-0.13	8.793	206.1
260	1 16		0.01	8.949	99.8	610	7.457_n	8.219_n	-0.13	8.776	196.1
270	1	8.933	-0.01	8.933	93.0	620	7.460,	7.744_{n}	-0.13	8.763	185.5
28 0		8.915	- -0.01	8.916	85.9	630	7.453_n	7.744	-0.13	10.	
290	6.901	8.889	-+0.04	8.898	78.4	640	7.438_{n}	8.219	-0.13	8.759	163.2
300	11	8.854	+0.06	8.880	70.4	650	, , ,,	8.436	-0.12		-
310	, 50	8.809	+-0.08	8.863	62.0	660	1 31 31		-0.11	1 3	141.6
320		8.751	+0.10	8.848	53.1	670	7.323_n		-0.10		7 ,
330		8.675	+0.11	8.836	_		1 3316		0.08		
340	7.442	8.576	+0.13	8.827	34.1	690	7.156 _n	8.809	0.07	8.849	114.0
350	7.481	8.436	+0.14	8.823	24.2	700	7.016 _n	8.854	-0.05	8.872	106.2

Konstanten zur Berücksichtigung der Nutationsglieder von kurzer Periode für 1913.

(($\log A'$	$\log B'$	f'	$\log g'$	G'	($\log A'$	$\log B'$	f'	$\log g'$	G'
700 710 720 730 740	7.016 _n 6.784 _n 6.186 _n 6.504	8.854 8.889 8.915 8.933 8.943	0.05 0.03 0.01 +-0.02 +-0.04	8.894 8.915	106.2 98.9 92.1 85.7 79.6	850 860 870 880 890	7.669 7.674 7.674 7.667 7.654	8.436 8.219 7.744 7.744 _n 8.219 _n	+0.22 -+0.22 +0.22 +0.21 +0.21	8.989 8.983 8.977 8.970 8.963	16.3 9.9 3.4 356.6 349.6
750 760 770 780 790	7.110 7.248 7.350 7.429 7.492	8.946 8.943 8.933 8.915 8.889	+0.06 +0.08 +0.10 +0.12 +0.14	. /	73.7 68.0 62.4 56.8 51.3	900 910 920 930 940	7.634 7.666 7.569 7.522 7.461	8.436 _n 8.576 _n 8.675 _n 8.751 _n 8.809 _n	+0.20 +0.19 +0.17 +0.15 +0.13	8.950 8.945 8.941	342.4 335.0 327.5 319.8 312.0
800 810 820 830 840	7.542 7.583 7.615 7.640 7.658	8.854 8.809 8.751 8.675 8.576	+0.16 +0.18 +0.19 +0.20 +0.21 +0.22	9.001 9.000 8.998 8.994	45.7 40.0 34.3 28.4 22.4	950 960 970 980 990	7.383 7.280 7.133 6.899 6.325	8.854 _n 8.889 _n 8.915 _n 8.933 _n 8.943 _n	+0.11 +0.09 +0.06 +0.04 +0.01	8.936 8.938 8.940 8.944	280.5 272.8

Korrektion der Schiefe der Ekliptik für die Glieder von kurzer Periode.

Λrgι	Argument		Argu (inent	Δε	Argu (ment (Δε
000 020 040 060 080	500 520 540 560 580	+0.09 +0.09 +0.08 +0.07 +0.05	200 220 240 260 280	700 720 740 760 780	-0.07 -0.08 -0.09 -0.09 -0.08	400 4 2 0 440 460 480	900 920 940 960 980	+0.03 +0.05 +0.07 +0.08 +0.09
100 120 140 160 180	600 620 640 660 680	+0.03 +0.01 -0.02 -0.04 -0.06	300 320 340 360 380	800 820 840 860 880	0.07 0.06 0.04 0.02 +-0.01	500	000	+0.09
200	700	-0.07	400	900	+0.03			

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6h 38m.9 Berlin.

Datum in Mittl. Zeit	t	log. A	\log . B	log. C	$\log_{*}D$	C
Jan. 0.499	0,000	8.5744_n	0.9337 _n	0.5115 _n	1.3045	-3.247
1.497	0.0027	8.5400 _n	0.9326	0.5532_{n}	1.3031	3.575
2 .494	0.0055	8.4932_n	0.9310	0.5912,	1.3015	3.901
3.491	0.0082	8.4286_n	0.9295_n	0.6260,	1.2998	4.227
4.488	0.0109	8.3399_n	0.9284_n	0.6581,	1.2980	4.551
5.486	0.0136	8.2164 _n	0.928Tn	0.6878	1.2960	4.873
6.483	0.0164	8.0390 _n	0.9286 _n	0.7155_n	1.2938	5.194
7.480	0.0191	7.7566_n	0.9302	0.7414_n	1.2915	5.513
8.477	0.0218	7.0170 _n	0.9325_n	0.7657_n	1.2891	5.831
9.475	0.0246	7.4472	0.9351,	0.7886 _n	1.2865	6.147
10.472	0.0273	7.7619	0.9356 _n	0.8103,	1.2838	- 6.461
11.469	0.0300	7.9042	0.9363 _n	0.8307,	1.2809	
12.466	0.0328	7.9903	0.9370	0.8501 _n	1.2778	
13.464	0.0355	8.0577	0.9378_{n}	0.8686,	1.2746	
14.461	0.0382	8.1248	0.9386,	0.8861 _n	1.2712	
15.458	0.0410	8.2006	0.9393 _n	0.9029 _n	1.2677	
16.456	0.0437	8.2840	0.9402	0.9189_{n}^{n}	1.2640	
17.453	0.0464	8.3705	0.9410,	0.9342	1.2601	
18.450	0.0491	8.4542	0.9419_{n}	0.9488 _n	1.2561	
19.447	0.0519	8.5301	0.9427 _n	0.9628_{n}^{n}	1.2518	
20.445	0.0546	8.5959	0.9436 _n	0.9763,	1.2474	
21.442	0.0573	8.6504	0.9445,	0.9892	1.2428	
22.439	0.0601	8.6934	0.9454n	1.0016,	1.2381	
23.436	0.0628	8.7258	0.9464 _n	1.0135	1.2331	
24 434	0.0655	8.7494	0.9473 _n	1.0250	1.2280	
25.431	0.0683	8.7668	0.9482 _n	1.0360 _n	1.2226	
26.428	0.0710	8.7805	0.9492 _n	1.0467 _n	1.2171	
27.426	0.0737	8.7928	0.9502	1.0569 _n	1.2113	
28.423	0.0764	8.8070	0.9511	1.0668 _n	1.2053	
29.420	0.0792	8.8243	0.9521	1.0763	1.1991	
30.417	0.0819	8.8455	0.9531,	1.0855n	1.1927	
31.415	0.0846	8.8699	0.9541	1.0943 _n	1.1861	
Febr. 1.412	0.0874	8.8960	0.9550_{n}^{n}	1.1029	1.1792	
2.409	0.0901	8.9218	0.9560 _n	I.IIII _n	1.1721	14
3.406	0.0928	8.9455	0.9570 _n	1.1190 _n	1.1647	
4.404	0.0956	8.9656	0.9580 _n	1.1267 _n	1.1570	
5.401	0.0983	8.9815	0.9590	1.1341,	1.1491	
6.398	0.1010	8.9928	0.9599_n	1.1413,	1.1409	

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6^h 38^m.9 Berlin.

	guing fur o	ne Oternze	repochen	0 30 .9 1		
Datum in Mittl. Zeit	t	log. A	log. B	log. C	log. D	D
Febr. 6.398	0.1010	8.9928	0.9599 _n	1.1413 _n	1.1409	
7.395	0.1038	9.0003	0.9639 _n	1.1482,	1.1324	
8.393	0.1065	9.0050	0.9658,	1.1548	1.1236	
9.390	0.1092	9.0085	0.9670	1.1612,	1.1144	
10.387	0.1120	9.0125	0.9672	1.1674 _n	1.1050	
11.385	0.1147	9.0184	0.9668 _n	1.1734 _n	1.0952	
12.382	0.1174	9.0275	0.9659 _n	1.1791 _n	1.0850	
13.379	0.1201	9.0397	0.9649 _n	1.1847 _n	1.0745	
14.376	0.1229	9.0547	0.9643n	1.1900 _n	1.0635	
15.374	0.1256	9.0715	0.9643 _n	1.1951,	1.0522	
16.371	0.1283	9.0885	0.9651,	1.2001	1.0404	
17.368	0.1311	9.1044	0.9667_n	1.2048 _n	1.0282	
18.365	0.1338	9.1180	0.9690	1.2094 _n	1.0154	
19.363	0.1365	9.1289	0.9717 _n	1.2138,	1.0022	
20.360	0.1393	9.1368	0.9743 _n	1.2180_{n}	0.9884	
21.357	0.1420	9.1422	0.9765 _n	1.2220 _n	0.9740	
22.355	0.1447	9.1458	0.9780 _n	1.2259_n	0.9590	
23.352	0.1474	9.1486	0.9787_n	1.2296 _n	0.9433	
24.349	0.1502	9.1519	0.9785 _n	1.2331	0.9269	
25.346	0.1529	9.1567	0.9777 _n	1.2365_n	0.9098	
26.344	0.1556	9.1635	0.9765_n	1.2397_n	0.8918	
27.341	0.1584	9.1724	0.9754n	I.2427 _n	0.8729	
28.338	0.1611	9.1829	0.9747 _n	1.2456 _n	0.8530	
März 1.335	0.1638	9.1942	0.9747n	1.2483_n	0.8320	
2.333	0.1666	9.2052	0.9755_n	1.2509_n	0.8098	+6.454
3.330	0.1693	9.2150	0.9770 _n	1.2534_n	0.7864	+6.114
4.327	0.1720	9.2230	0.9791 _n	1.2557_n	0.7614	5.773
5.325	0.1747	9.2286	0.9814 _n	r.2578 _n	0.7348	5.43
6.322	0.1775	9.2320	0.9836 _n	1.2598_n	0.7063	5.085
7.319	0.1802	9.2336	0.9852_n	1.2617_n	0.6757	4.739
8.316	0.1829	9.2341	0.9861 _n	1.2634 _n	0.6427	+4.392
9.314	0.1857	9.2346	0.9862,	1.2650 _n	0.6068	4.044
10.311	0.1884	9.2360	0.9855_n	1.2665_n	0.5675	3.69
11.308	0.1911	9.2391	0.9842	1.2678_{n}	0.5242	3.343
12.305	0.1939	9.2443	0.9827 _n	1.2690 _n	0.4760	2.99
13.303	0.1966	9.2516	0.9813 _n	1.2700	0.4218	+2.64
14.300	0.1993	9.2605	0.9804 _n	1.2709_n	0.3595	2.28
15.297	0.2021	9.2702	0.9802 _n	1.2717 _n	0.2868	1.93

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6^h 38^m.9 Berlin.

Datum in Mittl. Zeit	t	log. A	\log . B	log. C	log. D	D
März 15. 2 97	0.2021	9.2702	0.9802,	1.2717 _n	0.2868	-1-1.93
16.294	0.2048	9.2798	0.9809,	1.2724n	0.1992	1.58
17.292	0.2075	9.2883	0.9822	1.2729_n	0.0893	1.22
18.289	0.2102	9.2954	0.9840,	1.2733_n	9.9418	0.87
19.286	0.2130	9.3006	0.9859 _n	1.2735_n	9.7166	0.52
20.284	0.2157	9.3040	0.9875_n	1.2737 _n	9.2225	+-0.16
21.281	0.2184	9.3061	0.9886 _n	1.2737_n	9.2713_n	-0.18
22.278	0.2212	9.3074	0.9888 _n	1.2735_n	9.7325 _n	0.540
23.275	0.2239	9.3088	0.9882	1.2733n	9.9510 _n	0.893
24.2 73	0.2266	9.3111	0.9869 _n	1.27 2 9 _n	0.0955 _n	1.246
25.270	0.2294	9.3146	0.9851 _n	1.2724,	0.2035,	-1.598
26.267	0.2321	9.3198	0.9832_n	1.2717_n	0.2898_{n}^{n}	1.949
27.264	0.2348	9.3264	0.9815n	1.27 C 9_n	0.3617,	2.300
28.262	0.2375	9.3339	0.9804n	1.2700 _n	0.4231 _n	2.649
29.259	0.2403	9.3418	0.9801 _n	1.2690 _n	0.4768 _n	2.99
30.256	0.2430	9.3491	0.9805,	1.2678 _n	0.5245_n	-3.340
31.254	0.2157	9.3553	0.9816,	1.2665_n	0.5673_n	3.692
April 1.251	0.2485	9.3600	0.9831,	1.2651 _n	0.6061 _n	4.03'
2.248	0.2512	9.3630	0.9845_n	1.2635 _n	0.6416,	4.38
3.245	0.2539	9.3646	0.9856,	1.2618 _n	0.6742 _n	4.72
4.243	0.2567	9.3652	0.9861,	1.2600 _n	0.7045 _n	- 5.062
5.240	0.2594	9.3655	0.9857_n	1.2580 _n	0.7326_n	5.403
6.237	0.2621	9.3663	0.9845 _n	1.2559_n	0.7589_n	5.749
7.234	0.2649	9.3681	0.9826_n	1.2537_n	0.7836	6.07
8.232	0.2676	9.3715	0.9804n	1.2513_n	0.8068_{n}	6.409
9.229	0.2703	9.3766	0.9781 _n	1.2488_{n}	0.8286 _n	
10.226	0.2730	9.3830	0.9762 _n	1.2461 _n	0.8494 _n	
11.223	0.2758	9.3904	0.9749 _n	1.2433n	0.8690,	
12.221	0.2785	9.3981	0.9744 _n	1.2404n	0.8876	
13.218	0.2812	9.4054	0.9748_{n}	1.2373n	0.9054 _n	
14.215	0.2840	9.4116	0.9757 _n	1.2340 _n	0.9223 _n	
15.213	0.2867	9.4166	0.9769_n	1.2306 _n	0.9385 _n	
16.210	0.2894	9.4203	0.9780 _n	$1.227I_{n}$	0.9539_n	
17.207	0.2922	9.4227	0.9786 _n	1.2234_n	0.9687_n	
18.204	0.2949	9.4245	0.9785 _n	1.2196 _n	0.9829_n	
19.202	0.2976	9.4261	0.9776 _n	1. 2 156 _n	0.9965 _n	
20.199	0.3003	9.4282	0.9758_n	1.2114 _n	1.0096 _n	
21.196	0.3031	9.4312	0.9735_n	1.2071	1.0221	

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6h 38m.9 Berlin.

	Oatum Iittl. Zeit	t	log. A	log. B	log. C	log. D
April	21.196	0.3031	9.4312	0.9735n	1. 2 071 _n	1.0221
	22.193	0.3058	9.4354	0.9709 _n	1.2026	1.0341
	23.191	0.3085	9.4408	0.9684,	1.1979	1.0458
	24.188	0.3113	9.4471	0.9664 _n	1.1930,	1.0569 _n
	25.185	0.3140	9.4539	0.9651	1.1880 _n	1.0677_n
	26.183	0.3167	9.4606	0.9646,	1.1828 _n	1.0781 _n
	27.180	0.3195	9.4665	0.9650,	1.1774_{n}	1.0881,
	28.177	0.3222	9.4715	0.9659 _n	1.1718,	1.0978 _n
	29.174	0.3249	9.4751	0.9669,	1.1661 _n	1.1071 _n
	30.172	0.3277	9.4776	0.9677_n	1.1601 _n	1.1161 _n
Mai	1.169	0.3304	9.4792	0.9680 _n	1.1539 _n	1.1248
	2.166	0.3331	9.4803	0.9675_n	1.1475 _n	1.1332 _n
	3.163	0.3358	9.4816	0.9662,	1.1409_n	1.1413 _n
	4.161	0.3386	9.4836	0.9640 _n	1.1340 _n	1.1492 _n
	5.158	0.3413	9.4866	0.9614 _n	1.1270 _n	1.1567_n
	6.155	0.3440	9.4909	0.9586,,	1.1196,	1.1641 _n
	7.152	0.3468	9.4964	0.9561,	1.1121_n	1.1711 _n
	8.150	0.3495	9.5027	0.9542 _n	1.1043 _n	1.1780 _n
	9.147	0.3522	9.5096	0.9530 _n	1.0962 _n	1.1846 _n
	10.144	0.3550	9.5162	0.9528 _n	1.0878 _n	1.1910 _n
	11.142	0.3577	9.5223	0.9533 _n	1.0792,	1.1972 _n
	12.139	0.3604	9.5275	0.9543 _n	1.0703,	I.2031 _n
	13.136	0.363 r	9.5316	0.9554n	1.0610 _n	1.2089 _n
	14.133	0.3659	9.5348	0.9561	1.0515 _n	1.2144 _n
	15.131	0.3686	9.5373	0.9562 _n	1.0416 _n	1.2198_{n}
	16.128	0.3713	9.5394	0.9555_n	1.0313 _n	1.2250 _n
	17.125	0.3741	9.5418	0.9539_n	1.0207	1.2299_n
	18.122	0.3768	9.5447	0.9516 _n	1.0097_n	1.2348_n
	19.120	0.3795	9.5485	0.9488 _n	0.9983_n	1.2394_n
	20.117	0.3823	9.5532	0.9461 _n	0.9864 _n	1.2439_n
	21.114	0.3850	9.5587	0.9438,	0.9741	1.2482,
	22.112	0.3877	9.5647	0.9421 _n	0.9613 _n	1.2523 _n
	23.109	0.3904	9.5708	0.9414,	0.9481 _n	1.2563_n
	24.106	0.3932	9.5766	0.9416 _n	0.9343,,	1.2601 _n
	25.103	0.3959	9.5816	0.9425	0.9199_n	1.2637_n
	26.101	0.3986	9.5856	0.9437 _n	0.9048	1.2672_{n}
	27.098	0.4014	9.5887	0.9449 _n	0.8892_{n}	1.2706 _n
	28.095	0.4041	9.5910	0.9457_n	0.8728_{n}	1.2738_n

REDUKTIONSTAFELN.

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6^h 38^m.9 Berlin.

Datum in Mittl. Zeit	t	log. A	$\log_{\bullet} B$	log. C	$\log D$	c
Mai 28.095	0.4041	9.5910	0.9457 _n	0.8728,	1.2738 _n	7.46
29.092	0.4068	9.5927	0.9458_n	0.8556_n	1.2769_n	7.17
30.090	0.4096	9.5943	0.9450_{n}	0.8377_n	1.2798_{n}	6.88
31.087	0.4123	9.5964	0.9433 _n	0.8188	1.2826_{n}^{n}	6.58
Juni 1.084	0.4150	9.5991	0.9411 _n	0.799° _n	1.2852 _n	6.29
2.081	0.4178	9.6027	0.9385 _n	0.778T _n	1.2877 _n	-5.99
3.079	0.4205	9.6072	0.9360 _n	0.7560 _n	1.2901,	5.70
4.076	0.4232	9.6126	0.9341 _n	0.7326_n	1.2924 _n	5.40
5.073	0.4259	9.6184	0.9330 _n	0.7078 _n	1.2945 _n	5.10
6.071	0.4287	9.6243	0.9329_n	0.6813_n	1.2964 _n	4.80
7.068	0.4314	9.6298	0.9336 _n	0.6530 _n	1.2983_n	-4.49
8.065	0.4341	9.6347	0.9350_{n}	0.6226 _n	1.3000 _n	4.19
9.062	0.4369	9.6388	0.9366 _n	0.5898_{n}	1.3016 _n	3.88
10.060	0.4396	9.6421	0.9381,	0.5542_n	1.3031,	3.58
11.057	0.4423	9.6447	0.9390 _n	0.5152_n	1.3044 _n	3.27
1 2. 054	0.4451	9.6470	0.9392_n	0.4723_n	1.3056,	- 2.96
13.051	0.4478	9.6492	0.9384 _n	0.4246 _n	1.3067 _n	2.69
14.049	0.4505	9.6517	0.9369_n	0.3709_n	1.3077n	2.34
15.046	0.4532	9.6549	0.9348 _n	0.3094 _n	1.3085 _n	2.03
16.043	0.4560	9.6587	0.9326 _n	0.2377_n	1.3093 _n	1.72
17.041	0.4587	9.6632	0.9306 _n	0.1516 _n	1.3099 _n	-1.43
18.038	0.4614	9.6682	0.9293_n	0.0439 _n	1.3104,	1.10
19.035	0.4642	9.6734	0.9289_n	9.9003_n	1.3107	0.79
20.032	0.4669	9.6784	0.9294_n	9.6841 _n	1.3110,	0.48
21.030	0.4696	9.6829	0.9308 _n	9.2339_n	1.3111,	0.1
22.02 7	0.4724	9.6867	0.9 32 7 _n	9.1477	1.3111 _n	+0.1
23.024	0.4751	9.6897	0.9347 _n	9.6553	1.3110	0.45
24.021	0.4778	9.6919	0.9365_n	9.8830	1.3108 _n	0.70
25.019	0.4806	9.6936	0.9376_n	0.0314	1.3104 _n	1.0
26.016	0.4833	9.6951	0.9379_n	0.1418	1.3099 _n	1.38
27.013	0.4860	9.6967	0.9373 _n	0.2296	1.3093_n	4-1.69
28.011	0.4887	9.6988	0.9360 _n	0.3025	1.3086,	2.00
29.008	0.4915	9.7014	0.9343 _n	0.3648	1.3078	2.3
30.005	0.4942	9.7049	0.9325 _n	0.4192	1.3068 _n	2.63
Juli 1.002	0.4969	9.7090	0.9311 _n	0.4674	1.3058	2.9
2.000	0.4997	9.7136	0.9304 _n	0.5107	1.3046 _n	+3.2.
2.997	0.5024	9.7183	0.9307 _n	0.5499	1.3032 _n	3.5
3.994	0.5051	9.7229	0.9319_n	0.5858	1.3018 _n	3.8

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6^h 38^m.9 Berlin.

Datum in Mittl. Zeit	t	log. A	log. B	log. C	log. D	C
Juli 3.994	0.5051	9.7229	0.9319,,	0.5858	1.3018,	 -+3.853
4.991	0.5079	9.7271	0.9338	0.6188	1.3002	4.157
5.989	0.5106	9.7307	0.9362	0.6494	1.2985 _n	4.461
6.986	0.5133	9.7335	0.9386	0.6778	1.2967_n	4.763
7.983	0.5160	9.7358	0.9406,	0.7044	1.2947 _n	5.063
8.980	0.5188	9.7377	0.9418	0.7294	1.2927_n	-1-5.363
9.978	0.5215	9.7393	0.9422	0.7529	1.2904,	5.661
10.975	0.5242	9.7412	0.9418	0.7750	1.2881,	5.957
11.972	0.5270	9.7434	0.9407 _n	0.7960	1.2856 _n	6.252
12.970	0.5297	9.7461	0.9393 _n	0.8159	1.2830 _n	6.545
13.967	0.5324	9.7495	0.9379	0.8348	1.2803 _n	
14.964	0.5352	9.7533	0.9371	0.8528	1.2774_{n}	
15.961	0.5379	9.7573	0.9371	0.8700	I.2743 _n	
16.959	0.5406	9.7613	0.9379 _n	0.8864	1.2712,	
17.956	0.5433	9.7650	0.9397 _n	0.9021	1.2678_n	
18.953	0.5461	9.7682	0.9421	0.9171	1.2644 _n	
19.950	0.5488	9.7707	0.9448_{n}	0.9316	1.2608	
20.948	0.5515	9.7725	0.9473 _n	0.9454	1.2570 _n	
21.945	0.5543	9.7738	0.9494 _n	0.9587	1.2531 _n	
22.942	0.5570	9.7748	0.9507 _n	0.9715	1.2490 _n	
23.940	0.5597	9.7757	0.9511	0.9838	1.2448 _n	107
24.937	0.5625	9.7769	0.9506 _n	.0.9957	1.2404 _n	
25.934	0.5652	9.7786	0.9497 _n	1.0071	1.2358 _n	
26.931	0.5679	9.7809	0.9485 _n	1.0181	1.2311,	
27.929	0.5707	9.7838	0.9475 _n	1.0288	1.2262 _n	
28.926	0.5734	9.7871	0.9471 _n	1.0390	1.2211	
29.923	0.5761	9.7907	0.9476 _n	1.0489	1.2158	
30.920	0.5789	9.7943	0.9489_n	1.0585	1.2104	
31.918	0.5816	9.7976	0.9510,	1.0678	1.2047 _n	
Aug. 1.915	0.5843	9.8004	0.9537_n	1.0767	1.1989 _n	
2.912	0.5870	9.8027	0.9564 _n	1.0854	1.1928 _n	
3.909	0.5898	9.8044	0.9590 _n	1.0937	1.1865 _n	
4.907	0.5925	9.8057	0.9609 _n	8101.1	1.1801,	
5.904	0.5952	9.8067	0.9620,	1.1096	1.1734 _n	
6.901	0.5980	9.8078	0.9622	1.1172	1.1664 _n	
7.899	0.6007	9.8091	0.9617 _n	1.1245	1.1593 _n	
8.896	0.6034	9.8108	0.9607,	1.1316	1.1518	
9.893	0.6062	9.8131	0.9597	1.1385	1.1442	

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6h 38m.9 Berlin.

Datum in Mittl. Zeit	t	log. A	$\log B$	log. C	log. D	D
Aug. 9.893	0.6062	9.8131	0.9597 _n	1.1385	1.1442	
10.890	0.6089	9.8157	0.9589_n	1.1451	1.1362	
11.888	0.6116	9.8187	0.9588	1.1515	1.1280	
12.885	0.6143	9.8218	0.9595_n	1.1577	1.1194	
13.882	0.6171	9.8247	0.9611,	1.1637	1.1107,	
14.879	0.6198	9.8272	0.9633 _n	1.1695	1.1016 _n	
15.877	0.6225	9.8291	0.9659_n	1.1751	1.0922 _n	
16.874	0.6253	9.8305	0.9686 _n	1.1805	1.0824 _n	
17.871	0.6280	9.8313	0.9709 _n	1.1857	1.0723_n	
18.869	0.6307	9.8318	0.9724_{n}	1.1908	1.0618 _n	
19.866	0.6335	9.8322	0.9732 _n	1.1957	1.0510,	
20.863	0.6362	9.8326	0.973 I _n	1.2004	1.0397 _n	
21.860	0.6389	9.8334	0.9724 _n	1.2049	1.0280,	
22.858	0.6417	9.8348	0.9713_{n}	1.2093	1.0158 _n	
23.855	0.6444	9.8366	0.970 2 _n	1.2135	1.0032 _n	
24.852	0.6471	9.8389	0.9694 _n	1.2175	0.9901,	
25.849	0.6498	9.8416	0.9694 _n	1.2214	0.9763 _n	
26.847	0.6526	9.8443	0.9702	1.2251	0.9620 _n	
27.844	0.6553	9.8470	0.9718 _n	1.2287	0.9471 _n	
28.841	0.6580	9.8492	0.9740 _n	1.2321	0.9316 _n	
29.838	0.6608	9.8510	0.9764 _n	1.2354	0.9153 _n	
30 .83 6	0.6635	9.8523	0.9787_n	1.2386	0.8983,	
31.833	0.6662	9.8531	0.9805 _n	1.2416	0.8804n	
Sept. 1.830	0.6690	9.8537	0.9817n	1.2444	0.8616 _n	
2.828	0.6717	9.8542	0.9819 _n	1.2471	0.8418	4
3.825	0.6744	9.8549	0.9814,	1.2497	0.8209n	6.62
4.822	0.6771	9.8559	0.9802,	1.2521	0.7989 _n	6.29
5.819	0.6799	9.8561	0.9788_{n}	1.2544	0.7755_n	5.96
6.817	0.6826	9.8592	0.9776 _n	1.2566	0.7507 _n	5.63
7.814	0.6853	9.8615	0.9768 _n	1.2586	0.7 2 4I _n	5.29
8.811	0.6881	9.8639	0.9767_n	1.2605	0.6958 _n	-4.96
9.808	0.6908	9.8662	0.9774 _n	1.2623	0.6652,	4.62
10.806	0.6935	9.8683	0.9789,	1.2639	0.6323,	4.28
11.803	0.6963	9.8700	0.9808	1.2655	0.5964,	3.94
12.800	0.6990	9.8711	0.9829_n	r.2668	0.5572 _n	3.60
13.798	0.7017	9.8718	0.9848 _n	1.2681	0.5140 _n	-3.26
14.795	0.7045	9.8720	0.9860 _n	1.2692	0.4657_n	2.92
15.792	0.7072	9.8721	0.9865 _n	1.2702	0.4113_n	2.57

REDUKTIONSTAFELN.

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6h 38m.9 Berlin.

Datum in Mittl. Zeit	t	log. A	log. B	log. C	log. D	D
Sept. 15.792	0.7072	9.8721	0.9865,	1.2702	0.4113 _n	-2.578
16.789	0.7099	9.8721	0.9862	1.2711	0.3488	2.233
17.787	0.7126	9.8725	0.9851 _n	1.2718	0.2757 _n	1.88
18.784	0.7154	9.8732	0.9835n	1.2725	0.1874_n	1.540
19.781	0.7181	9.8745	0.9818_{n}	1.2729	0.0763 _n	1.192
20.778	0.7208	9.8762	0.9803 _n	1.2733	9.9265 _n	-0.84
21.776	0.7236	9.8783	0.9793n	1.2736	9.6954 _n	0.490
22.773	0.7263	9.8806	0.9791 _n	1.2737	9.1675n	-0.14
23.770	0.7290	9.8829	0.9796,	1.2737	9.3051	+0.20
2 4.767	0.7318	9.8849	0.9809 _n	1.2735	9.7412	0.55
25.765	0.7345	9.8866	0.9825 _n	1.2733	9.9544	+0.90
26.762	0.7372	9.8878	0.9842 _n	1.2729	0.0967	1.24
27.759	0.7400	9.8886	0.9855_n	1.2724	0.2036	1.59
28.757	0.7427	9.8891	0.9861 _n	1.2717	0.2894	1.94
29.754	0.7454	9.8895	0.9860 _n	1.2709	0.3608	2.29
30.751	0.7481	9.8899	0.9850 _n	1.2700	0.4221	+2.64
Okt. 1.748	0.7509	9.8906	0.9833_n	1.2690	0.4757	2.99
2.746	0.7536	9.8917	0.9812,	1.2678	0.5233	3.33
3.743	0.7563	9.8933	0.9791 _n	1.2665	0.5662	3.68
4.740	0.7591	9.8952	0.9773_n	1.2651	0.6051	4.02
5.737	0.7618	9.8974	0.9762 _n	1.2635	0.6406	+4.37
6.735	0.7645	9.8996	0.9758 _n	1.2618	0.6734	4.71
7.732	0.7673	9.9017	0.9762 _n	1.2600	0.7038	5.05
8.729	0.7700	9.9034	0.9772	1.2580	0.7321	5.39
9.727	0.7727	9.9047	0.9785_n	1.2559	0.7586	5.73
10.724	0.7754	9.9056	0.9797_n	1.2537	0.7834	-1-6.07
11.721	0.7782	9.9060	0.9805 _n	1.2513	0.8068	6.40
12.718	0.7809	9.9062	0.9806 _n	1.2487	0.8288	
13.716	0.7836	9.9063	0.9798_{n}	1.2461	0.8497	
14.713	0.7864	9.9066	0.9782_{n}	1.2432	0.8696	
15.710	0.7891	9.9072	0.9760 _n	1.2402	0.8884	
16.707	0.7918	9.9083	0.9734 _n	1.2371	0.9063	
17.705	0.7946	9.9099	0.9710 _n	1.2338	0.9235	
18.702	0.7973	9.9119	0.9690 _n	1.2304	0.9398	
19.699	0.8000	9.9142	0.9677_n	1.2267	0.9555	
20.696	0.8028	9.9165	0.9672 _n	1.2230	0.9704	
21.694	0.8055	9.9187	0.9675_n	1.2190	0.9848	
22.691	0.8082	9.9206	0.9684 _n	1.2749	0.9986	

REDUKTIONSTAFELN.

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6^h 38^m.9 Berlin.

Datum in Mittl. Zeit	t	log. A	$\log B$	log. C	log. L
Okt. 22.691	0.8082	9.9206	0.9684,	1.2149	0,9986
23.688	0.8109	9.9220	0.9694,	1.2106	1.0118
24.686	0.8137	9.9232	0.9703_{n}	1.2062	1.0246
25.683	0.8164	9.9239	0.9706_{n}	1.2015	1.0368
2 6.680	0.8191	9.9246	0.9702_{n}	1.1967	1.0486
27.677	0.8219	9.9252	0.9688,	1.1917	1.0599
28.675	0.8246	9.9260	0.9667,	1.1865	1.0709
29.672	0.8273	9.9272	0.9641,	1.1810	1.0814
30.669	0.8301	9.9287	0.9613	1.1754	1.0916
31.666	0.8328	9.9307	0.9586	1.1696	1.1014
Nov. 1.664	0.8355	9.9330	0.9566 _n	1.1636	1.1109
2.661	0.8382	9.9354	0.9553 _n	1.1573	1.1201
3.658	0.8410	9.9377	0.9549 _n	1.1508	1.1289
4.656	0.8437	9.9398	0.9553_n	1.1441	1.1375
5.653	0.8464	9.9415	0.9561,	1.1371	1.1457
6.650	0.8492	9.9428	0.9570 _n	1.1299	1.1537
7.647	0.8519	9.9437	0.9577_n	1.1224	1.1614
8.645	0.8546	9.9443	0.9577_n	1.1146	1.1688
9.642	0.8574	9.9448	0.9568 _n	1.1066	1.1760
10.639	0.8601	9.9453	$0.955I_{n}$	1.0983	1.1829
11.636	0.8628	9.9461	0.95 2 7 _n	1.0896	1.1896
12.634	0.8656	9.9474	0.9499 _n	1.0807	1.1961
13.631	0.8683	9.9490	0.9469_n	1.0714	1.2024
14.628	0.8710	9.9511	0.9443 _n	1.0618	1.2084
15.626	0.8737	9.9534	0.9424 _n	1.0518	1.2142
16.623	0.8765	9.9559	0.9414 _n	1.0415	1.2198
17.620	0.8792	9.9584	0.9413_{n}	1.0307	1.2252
18.617	0.8819	9.9606	0.9419_n	1.0196	1.2304
19.615	0.8847	9.9625	0.9429_{n}	0800.1	1.2355
20.612	0.8874	9.9640	0.9439_n	0.9959	1.2403
21.609	0.8901	9.9652	0.9445 _n	0.9834	1.2450
22.606	0.8929	9.9662	0.9444 _n	0.9703	1.2494
23.604	0.8956	9.9672	0.9434_{n}	0.9567	1.2537
24.601	0.8983	9.9682	0.9415_n	0.9425	1.2578
25.598	0.9010	9.9696	0.9390 _n	0.9277	1.2618
26.595	0.9038	9.9712	0.9361 _n	0.9122	1.2656
27.593	0.9065	9.9733	0.9334_n	0.8960	1.2692
28.590	0.9092	9.9756	0.9311 _n	0.8790	1.2726

E = 0.00

Konstanten für die Sterntage 1913, gültig für die Sternzeitepochen 6h 38m.9 Berlin.

Datum in Mittl. Zeit	t	log. A	log. B	log. C	\log . D	C
Nov. 28.590	0.9092	9.9756	0.9311,,	0.8790	1.2726	
29.587	0.9120	9.9781	0.9297,	0.8612	1.2759	
30.585	0.9147	9.9806	0.9291	0.8424	1.2791	
Dez. 1.582	0.9174	9.9830	0.9295_n	0.8227	1.2820	
2.579	0.9202	9.9850	0.9 3 06 _n	0.8019	1.2849	+6.338
3.576	0.9229	9.9867	0.9319 _n	0.7799	1.2876	+6.023
4.574	0.9256	9.9879	0.9332 _n	0.7565	1.2901	5.709
5.571	0.9284	9.9889	0.9339_n	0.7317	1.2924	5.392
6.568	0.9311	9.9897	0.9338_n	0.7053	1.2947	5.073
7.565	0.9338	9.9905	0.9328 _n	0.6769	1.2968	4.752
8.563	0.9365	9.9914	0.9311,	0.6464	1.2987	+4.430
9.560	0.9393	9.9926	0.9287,	0.6135	1.3005	4.10
10.557	0.9420	9.9943	0.9262 _n	0.5777	1.3021	3.782
11.555	0.9447	9.9963	0.9238,	0.5386	1.3036	3.456
12.552	0.9475	9.9986	0.9221,	0.4953	1.3050	3.129
13.549	0.9502	0.0010	0.9213,	0.4472	1.3062	-+2.80
14.546	0.9529	0.0035	0.9215,	0.3929	1.3073	2.47
15.544	0.9557	0.0059	0.9226,	0.3306	1.3083	2.14
16.541	0.9584	0.0079	0.9242,	0.2577	1.3091	1.81
17.538	0.9611	0.0097	0.9260 _n	0.1698	1.3098	1.47
18.535	0.9638	0.0111	0.9276	0.0594	1.3103	-+1.1 4
19.533	0.9666	0.0122	0.9285 _n	9.9107	1.3107	0.81.
20.530	0.9693	0.0132	0.9286 _n	9.6826	1.3110	0.48
21.527	0.9720	0.0143	0.9279_n	9.1722	1.3111	+0.14
22.524	0.9748	0.0156	0.9 2 63 _n	9.2654_n	1.3111	0.18
23.522	0.9775	0.0171	0.9243 _n	9.7137_n	1.3110	-0.51
24.519	0.9802	0.0189	0.9223_n	9.9294_n	1.3107	0.85
25.516	0.9830	0.0211	0.9206,	0.0729_n	1.3103	1.18
26.514	0.9857	0.0234	0.9196 _n	0.1804_n	1.3097	1.51
27.511	0.9884	0.0258	0.9196,	0. 2 664 _n	1.3090	1.84
28.508	0.9911	0.0281	0.9205_n	0.3380 _n	1.3082	-2.17
29.505	0.9939	0.0301	0.9223,,	0.3994n	1.3072	2.50
30.503	0.9966	0.0319	0.9245 _n	0.4531 _n	1.3061	2.83
31.500	0.9993	0.0332	0.9 2 67 _n	0.5007 _n	1.3048	3.16
32.497	1.0021	0.0342	0.9 2 86 _n	0.5435 _n	1.3035	3.49
33.494	1.0048	0.0350	0.9298 _n	0.5823_n	1.3019	-3.82
34.492	1.0075	0.0357	0.9302 _n	0.6178 _n	1.3003	4.14
35.489	1.0103	0.0365	0.9296 _n	0.6505 _n	1.2984	4.47

Konstanten für die mittleren Tage 1913,

zur Reduktion von dem Mittl. Äquin. 1910.0 auf das jedesmalige wahre Äquinoktium.

12 ^h Mittl. Zeit	ſ	log. y	G	12 ^h Mittl. Zeit	.f	\log . g	G
Jan. o	+136.59	1.77828	351 50.8	April 26	+151.49	1.82308	351° 58.4
4	137.32	1.78057	351 51.2	30	152.01	1.82447	352 3.6
8	138.03	1.78281	351 51.1	Mai 4	152.55	1.82592	352 9.0
12	138.73	1.78501	351 50.5	8	153.11	1.82743	352 14.4
16	139.41	1.78715	351 49.4	12	153.69	1.82898	352 19.8
20	4-140.07	1.78923	351 47.8	16	-1-154.29	1.83059	352 25.2
24	140.71	1.79125	351 45.8	20	154.91	1.83224	352 30.3
28	141.33	1.79320	351 43.6	24	155.55	1.83394	352 35.1
Febr. 1	141.93	1.79507	351 41.2	28	156.20	1.83569	352 39.8
5	142.50	1.79686	351 38.8	Juni 1	156.87	1.83747	352 44.2
9	+143.05	1.79857	351 36.3	5	+157.56	1.83929	352 48.2
13	143.57	1.80020	351 3 3 .9	9	158.25	1.84114	352 51.7
17	144.07	1.80176	351 31.6	13	158.95	1.84301	352 54-7
21	144.55	1.80325	351 29.5	17	159.65	1.84489	352 57-3
25	145.02	1.80466	351 27.8	21	160.36	1.84677	352 59.4
März 1	+145.46	1.80602	351 26.3	25	+161.07	1.84865	353 1.1
5	145.89	1.80733	351 25.3	29	161.77	1.85053	353 2.3
9	146.31	1.80859	351 2 4.8	Juli 3	162.47	1.85239	353 3.0
13	146.72	1.80981	351 24.8	7	163.17	1.85423	353 3-3
17	147.13	1.81099	351 25.3	11	163.85	1.85604	353 3.1
2,1	+147.53	1.81216	351 26.4	15	4-164.52	1.85782	353 2.5
2 5	147.93	1.81332	351 28.0	19	165.17	1.85955	353 1.6
29	148.33	1.81447	351 30.2	23	165.81	1.86124	353 0
April 2	148.75	1.81562	351 32.9	27	166.43	1.86289	352 58.9
6	149.17	1.81679	351 36.1	31	167.03	1.86449	35 ² 57-3
10	+149.60	1.81798	351 39.8	Aug. 4	+ 167.61	1.86602	352 55.5
1.4	150.05	1.81920	351 43.9	8	168.17	1.86750	352 53.6
18	150.51	1.82045	351 48.4	12	168.71	1.86893	352 51.7
22	150.99	1.82174	351 53.3	16	169.23	1.87030	352 49.8
2 6	151.49	1.82308	351 58.4	20	169.73	1.87160	352 48.0

Konstanten für die mittleren Tage 1913,

zur Reduktion von dem Mittl. Äquin. 1910.0 auf das jedesmalige wahre Äquinoktium.

12 ^h Mittl. Zeit		$\log g$	G	12 ¹ Mittl. Zeit	f	$\log g$	G
Aug. 20	+169.73	1.87160	352"48.0	Okt. 31	+ 177.63	1.89095	353° 14.6
24	170.21	1.87285	352 46.4	Nov. 4	178.16	1.89220	353 19.3
28	170.67	1.87405	352 45.0	8	178.72	1.89349	353 24.1
Sept. I	171.12	1.87521	352 43.8	12	179.31	1.89482	353 29.0
5	171.56	1.87633	352 43.0	16	179.92	1.89621	353 33.8
9	+171.98	1.87741	352 42.5	20	+180.55	1.89767	353 38.5
13	172.39	1.87845	352 42.4	24	181.20	1.89918	353 43.0
17	172.80	1.87946	352 42.7	28	181.87	1.90073	353 47-3
21	173.20	1.88046	352 43.5	Dez. 2	182.56	1.90232	353 51.2
25	173.60	1.88144	352 44.7	6	183.26	1.90393	353 54.8
29	+174.00	1.88242	352 46.3	01	+183.98	1.90558	353 58.0
Okt. 3	174.41	1.88340	352 48.5	14	184.71	1.90726	354 0.8
7	174.82	1.88439	352 51.1	18	185.44	1.90895	354 3.1
11	175.25	1.88540	352 54.2	22	186.17	1.91064	354 4.9
15	175.69	1.88644	352 57.6	26	186.91	1.91233	354 6.3
19	+176.15	1.88751	353 1.4	30	+187.64	1.91402	354 7.1
23	176.62	1.88861	353 5.6	34	188.37	1.91569	354 7.5
27	177.11	1.88976	353 10.0	38	189.08	1.91733	354 7.5
31	177.63	1.89095	353 14.6	42	189.78	1.91893	354 7.I

Red. in α $f + g \sin (G + \alpha) \operatorname{tg} \delta$ Red. in δ $g \cos (G + \alpha)$ Im Jahre 1913 werden drei Sonnen- und zwei Mondfinsternisse stattfinden, von denen jedoch keine in unseren Gegenden sichtbar sein wird.

I. Totale Mondfinsternis 1913 März 21—22, unsichtbar in Berlin.

Elemente der Finsternis nach mittlerer Berliner Zeit.

в in AR		März 22	o 41 48.2
(AR	• • •		12 4 37.54
			-0"18 28.5
⊙ »			+0 30 6.0
C stündliche Be	ewegung	in AR.	33 2.8
⊙ »	»	» » .	2 16.4
((»	»	» Dekl	-18 7.3
⊙ »	»	» »	+ 59.2
	Iorizonta	l-Parallaxe	60 58.5
⊙ »	»	»	8.8
« Halbmesser			16 36.9
⊙ »			16 2.7

Der Mond steht um diese Zeiten im Zenit der Orte, deren geographische Lage bezüglich ist:

207"	46	östl.	Länge	von	Greenwich	0	10	nördl.	Br.
193	4 1	»	>>	>>	»	0	7	südl.	»
182	24	»	»	>>	>>	0	2 I	»	»
171	7	>>	>>	»	»	0	36	»	»
157	2	>>	>>	>>	»	0	53	>>	>>

Positionswinkel des Eintritts vom Nordpunkt gezählt = 128°

» Austritts » » = 290

Größe der Verfinsterung in Teilen des Monddurchmessers = 1.575

Die Finsternis wird demnach sichtbar sein in Nordamerika, in der westlichen Hälfte Südamerikas, im Stillen Ozean, in Australien, in der östlichen Hälfte des Indischen Ozeans und in Asien mit Ausnahme von Persien. Arabien und Kleinasien.

II. Partielle Sonnenfinsternis 1913 April 6,

unsichtbar in Berlin.

Elemente der Finsternis

nach wahrer Berliner Zeit t.

	4 13 5.7	5 25 6.6	6 ^h 37 ^m 7.4	7 ^h 49 ^m 8.3	9 ^h 1 ⁿ 9.2
τ	63°.27 3 8	81°. 27 74	99°.2810	117°.2846	135°.2882
). C	15° 5′ 6.3	15°41'36.7	16° 18' 8.8	16° 54′ 42.4	17°31′17″5
β (+1 5 34.6	+1 8 52.1	+I I2 9.4	+1 15 26.2	+1 18 42.7
π. ((0 54 47.8	0 54 48.9	0 54 50.0	0 54 51.1	0 54 52.1
$\Delta \alpha' \odot$	_0 0 14.2 1	-○ ○ 9.39	-o o 4.58	+0 0 0.24	+0 0 5.06
δ′ ⊙	+6 22 53.5	+6 23 59.0	-1-6 25 4.5	+6 26 10.0	+6 27 15.5
N'	61 49 39.5	61 50 23.1	61 51 7.0	61 51 51.4	6 1 52 36.8
γ	-1-1.314900	+1.314914	-1-1.314927	+1.314941	+1.314956
u'_a	-+0.565468	-1-0.565406	-+ 0.565315	-+-0.565195	+0.565046
u'i	0.018966	0.018904	-0.018813	0.018694	-0.018546
$\log \sin f_a$	7.669414	7.669407	7.669401	7.669394	7.669388
$\log \sin f_i$	7.66 72 43 _n	7.667237_n	7.66 723 0 _n	7.667224_n	7.667217_n
$\log n$	9.711047	9.711087	9.711109	9.711112	9.711100
μ	96°.0 72 6	96°.0777	96°.08 2 7	96°.0877	96°.0927
k	62° 1′ 3.5	62° 1 50.5	62 2 37.9	62 3 25.9	62 4 14.7
g	28 49 41.8	28 49 12.6	28 48 43.4	28 48 13.6	28 47 42.8
K	86 35 35.8	86 35 7.3	86 34 38.9	86 34 10.5	86 33 42.1
G_{-}	11 43 27.2	11 45 44.7	11 48 2.4	11 50 20.4	11 52 38.9

				Mittl. Zeit Berlin	0. L. Gr.	Breite
Beginn der Finsternis				4 48 0	207 33	+28°50
Größte Verfinsterung				6 26.5	174 24	-+61 3
Ende der Finsternis				8 5.2	40 43	+-81 29

Die größte Verfinsterung beträgt in Teilen des Sonnendurchmessers 0.424.

Grenzkurven für die Sichtbarkeit der Finsternis.

	Südl. Grenze	Östl. Grenze			
O.L.Gr. Breite	O. L. Gr. Breite	O. L. Gr. Breite			
73 6 +82 46 112 18 80 44 141 37 74 19 152 50 67 24 160 33 61 1 167 0 54 32 173 36 47 9 180 33 39 5 187 20 31 30 193 56 25 10 204 1 +20 22	204 I +20 22 223 54 25 46 235 17 33 30 244 12 43 22 252 27 53 33 261 58 62 20 273 30 68 47 286 43 73 2 300 58 75 38 315 48 77 4 330 57 77 41 346 18 77 34 I 48 76 44 I 6 39 +75 29	16°39′ +75°29′ 21 46 75 58 36 24 78 58 67 51 +82 17			

Die nördliche Grenzkurve ist imaginär.

Die Finsternis wird demnach an der Nordostspitze Asiens, im nordwestlichen Nordamerika und in den nördlichen Polargegenden sichthar sein.

III. Partielle Sonnenfinsternis 1913 August 31, unsichtbar in Berlin.

Elemente der Finsternis nach wahrer Berliner Zeit τ .

	7 12 6.4	8 ^h 24 ^m 7.3	9 ^h 36 ^m 8.2	10 ^h 48 ^m 9 ^s .1	12 0 IO.I
τ	108°.0266	126°.0304	144°.0342	162°.0381	180°.0419
λζ	156 20 12.6	157 5 43.1	157 51 14.1	158° 36′ 45.6	159 22 17.5
3 (+1 36 52.5	+I 32 52.3	+1 28 51.1		+1 20 45.5
₹ ((1 1 16.5	1 1 17.0	1 1 17.4	I I 17.8	1 1 18.2
$\Delta \alpha' \odot$	-0 0 5.82	-0 0 0.32	+0 0 5.17	+0 0 10.67	+0 0 16.16
δ'⊙	+8 40 39.4	+8 39 37.2	-1-8 38 35.1	+8 37 32.9	+8 36 30.7
N'	117 16 2.7	117 17 1.2	117 18 0.5	117 19 0.4	117 20 1.0
γ	+1.450921	+1.450906	-1.450890	-+1.450874	+1.450858
u'a	-1-0.532280	+0.532312	+0.532308	+0.532267	+0.532190
u'_i	4-0.014056	-1-0.014024	-+0.014028	-1-0.014069	+0.014146
$\log \sin f_a$	7.665847	7.665852	7.665857	7.665862	7.665867
$\log \sin f_i$	7.663676_n	7.663681 _n	7.663686 _n	7.663691,	7.663696 _n
$\log n$	9.765705	9.765742	9.765760	9.765757	9.765732
μ	146°.3731	146°.3792	146°.3855	146°.3920	146°.3989
k	116°55 47.6	116 56 50.0	116° 57′ 53.1	116 58 57.0	117° 0′ 1.7
g	28 30 49.2	28 31 27.2	28 32 6.3	28 32 46.0	28 33 26.1
K	94 26 47.6	94 26 27.3	94 26 7.0	94 25 46.8	94 25 26.6
\overline{G}	163 41 2.8	163 43 31.1	163 45 59.8	163 48 29.0	163 50 58.7

				Mittl. Zeit Berlin	(). L. Gr.	Breite
Beginn der Finsternis				8 56 1	15°59	+77° 4
Größte Verfinsterung				9 46.1	334 37	-1-61 14
Ende der Finsternis				10 36.0	313 53	+43 26

Die größte Verfinsterung beträgt in Teilen des Sonnendurchmessers 0.152.

Grenzkurven für die Sichtbarkeit der Finsternis.

Südl. Grenze	Westl. Grenze	Östl. Grenze				
O. L. Gr. Breite	O.L. Gr. Breite	O. L. Gr. Breite				
314 43 +39 6 298 15 45 23 290 53 50 54 285 45 58 47 283 38 66 12 286 7 74 16 305 19 82 17 336 18 84 12	31°54′ + 79°34′	31° 54° +79° 34° 358° 56° 71° 49° 341° 52° 61° 13° 337° 7° 57° 7° 329° 34° 50° 0° 324° 53° 45° 34° 321° 4° 42° 17° 317° 51° 40° 2° 20° 34° 34° 32° 4° 42° 17° 317° 51° 40° 2° 20° 40° 40° 40° 40° 40° 40° 40° 40° 40° 4				
5 50 83 40 31 54 +79 34		314 43 +39 6				

Die nördliche Grenzkurve ist imaginär.

Die Finsternis wird demnach an der nordöstlichen Küste Nordamerikas und in Grönland sichtbar sein.

IV. Totale Mondfinsternis 1913 September 14-15, unsichtbar in Berlin.

Elemente der Finsternis

ர் in AR	Sept. 15	1 28 5.0
(AR		23 30 47.56
		-3°22'22.7
		+3 9 21.6
€ stündliche Bewegu	ng in AR	2 6 3.4
· » »	» » .	2 14.6
((» »	» Dekl	+14 8.8
⊙ » »	» » .	— 57·7
《 Äquatorial - Horizo	ntal-Parallaxe	53 57.9
⊙ » »	»	8.8
⟨ Halbmesser		14 42.3
⊙ »		15 54.6

Anfang der Finsternis überhaupt	 Sept.	14	23 46.5	mittl.	Berl.	Zt.
Anfang der totalen Verfinsterung	>>	15	0 55.0	>>	30	»
Mitte der Finsternis	>>	15	1 42.0	>>	33	>>
Ende der totalen Verfinsterung .					>>	>>
Ende der Finsternis überhaupt .					>>	>>

Der Mond steht um diese Zeiten im Zenit der Orte, deren geographische Lage bezüglich ist:

194	57	östl.	Länge	von	Greenwich	3	46	südl.	Br.
178	16	>>	>>	»	>>	3	30	>>	»
166 4	19	>>	»	>>	»	3	19	>>	>>
155 2	22	>>	»	>>	»	3	8	>>	>>
138	ļΙ	>>	»	»	»	2	52	>>	>>

Positionswinkel des Eintritts vom Nordpunkt gezählt = 49°

» Austritts » » = 253

Größe der Verfinsterung in Teilen des Monddurchmessers = 1.435

Die Finsternis wird demnach sichtbar im größten Teil von Nordund Zentralamerika, im Stillen Ozean, in Australien, in Asien mit Ausnahme von Kleinasien und im Indischen Ozean.

V. Partielle Sonnenfinsternis 1913 September 29, unsichtbar in Berlin.

Elemente der Finsternis

nach wahrer Berliner Zeit τ.

	15 ^h 52 ⁿ 41.1	17 4 42.1	18 ^h 16 ^m 43.1	19 ^h 28 ^m 44.1	20 40 45.0
τ	238°.1713	256°.1754	274° 1795	29 2° .1836	310°.1877
λ((185° 4 51.8	185° 50' 23"3	186° 35′ 54.4	187°21 24.9	188 6 54.7
βĈ	-1 0 21.4	-I 4 28.9	—т 8 <u>35.8</u>	-1 12 41.8	-r 16 47.0
π(1 1 18.4	1 1 18.0	1 1 17.5	I I 17.0	1 1 16.5
$\Delta \alpha' \bigcirc$	o o 13.28	-0 0 7.89	-0 0 2.5 0	+0 0 2.89	+0 0 8.28
გ′⊙	—2 31 0.0	-2327.1	2 33 14.2	-2 34 21.3	-23528.5
N'	118 51 48.4	118 51 15.2	118 50 41.1	118 50 6.4	118 49 31.5
γ	-1.101062	1.101096	-1.101131	-1.101167	-1.101203
u'u	+0.534271	+0.534348	-I-0.534389	+0.534393	+0.534359
u'_i	+0.012075	+0.011998	+0.011958	+0.011954	+0.011988
$\log \sin f_a$	7.669261	7.669267	7.669273	7.669280	7.669286
$\log \sin f_i$	7.667090 _n	7.667096 _n	7.667103_n	7.667109 _n	7.667115_n
$\log n$	9.765331	9.765354	9.765353	9.765326	9.76 52 74
h.	267°.2861	267°.2900	267°.2937	267°.2971	267°.3001
k	118° 49 58.9	118° 49 23.8	118 48 48.2	118° 48′ 12.1	118° 47 35.7
g	28 57 49.0	28 57 20.8	28 56 5 2 .1	28 56 23.4	28 55 55.2
K	88 36 48.7	88 36 13.7	88 35 38.8	88 35 3.9	88 34 29.0
G	184 33 17.0	184 35 24.1	184 37 31.6	184 39 39.2	184 41 46.8

				Mittl. Zeit Berlin	0. L. Gr.	Breite
Beginn der Finsternis				15 49.4	41°58	-17° 2
Größte Verfinsterung				17 39.7	10 38	-61 I
Ende der Finsternis				19 29.0	181 5	-7431

Die größte Verfinsterung beträgt in Teilen des Sonnendurchmessers 0.825.

Grenzkurven für die Sichtbarkeit der Finsternis.

Westl. Grenze	Nördl. Grenze	Östl. Grenze
0. L. Gr. Br.	0. L. Gr. Br.	O.L.Gr. Br.
261 18 -86 41 343 5 75 53 351 34 67 54 1 21 54 3 6 10 45 56 11 17 36 52 16 24 27 49 21 36 19 17	36° 36′ — 5° 41′ 52° 17′ 7° 34 64° 55′ 11° 56 75° 28′ 18° 36 84° 19′ 26° 55 92° 23′ 35° 44 100° 51′ 43° 56 110° 30′ 50′ 48	181° 23' —63° 26' 188 12 66' 11 195 58 72 9 208 45 79 52 219 3 82 14 284 8 —86' 55
26 58 11 58 32 28 6 58 36 36 — 5 41	121 30 56 4 133 43 59 49 146 51 62 14 160 37 63 29 181 23 —63 26	

Die südliche Grenzkurve ist imaginär.

Die Finsternis wird demnach im östlichen Südafrika, auf Madagaskar, im südlichen Teil des Indischen Ozeans und in der Südpolargegend sichtbar sein.

Verzeichnis von Fixsternen, welche im Jahre 1913 vom Monde bedeckt werden.

Nr.	N a m e	Gr.	Mittl. AR. 1913.0	Mittl. Dekl. 1913.0
I	ò Piscium	4.4	h m s	+ 7° 6′ 42.2
2	ε Piscium	4.2	0 58 25.57	+ 7 25 19.1
3	ε Arietis	4.6	2 54 14.03	+20 59 34.5
4	4 Arietis	4.9	3 9 53.85	+20 43 21.5
5	τ' Arietis	5.4	3 16 12.06	+20 50 2.6
6	17 Tauri	4.0	3 39 42.37	+23 50 26.0
7	19 Tauri	4.4	3 40 1.51	+24 11 41.8
8	20 Tauri	3.9	3 40 38.83	+24 5 47.6
9	23 Tauri	4.2	3 41 9.57	+23 40 40.5
10	η Tauri	3.0	3 42 18.60	+23 50 12.6
11	27 Tauri	3.8	3 43 59.16	+23 47 17.3
12	φ Tauri	5.1	4 15 0.04	+27 8 36.0
13	χ Tauri	5.5	4 17 17.13	$+25\ 25\ 28.7$
14	β Tauri	1.8	5 20 47.47	+28325.6
15	136 Tauri	4.7	5 47 51.57	+27 35 33.2
16	κ Aurigae	4.5	6 9 50.09	+29 31 51.6
17	49 Aurigae	5.3	6 29 43.32	+28 5 27.3
18	ι Geminorum	3.8	7 20 19.52	+275818.7
19	b' Geminorum	5.2	7 23 55.36	+28 17 53.8
20	b² Geminorum	5.1	7 24 24.18	+28 5 46.4
21	υ Geminorum	4.2	7 30 33.82	+27 5 23.4
22	χ Geminorum	3.4	7 39 11.85	-+-24 36 26.8
23	φ Geminorum	5.1	7 48 10.50	+26 59 30.2
24	γ Cancri	4.7	8 38 15.23	-+-21 46 54.9
25	ρ Leonis	3.8	10 28 13.90	+ 9 45 16.6
26	l Leonis	5.4	10 44 41.14	II 0 20.9
27	c Leonis	5.2	10 56 14.28	+ 6 34 8.4
28	χ Leonis	4.8	11 0 31.82	+74823.6

Verzeichnis von Fixsternen, welche im Jahre 1913 vom Monde bedeckt werden.

Nr.	N a m e	Gr.	Mittl. AR. 1913.0	Mittl. Dekl. 1913.0
29	σ Leonis	4.1	11 16 39.07	+ 6 30 22.6
30	τ Leonis	5.3	11 23 27.81	+ 3 20 7.5
31	β Virginis	3.5	11 46 9.81	+ 2 15 18.0
32	ψ Virginis	5.0	12 49 49.61	- 9 4 0.0
33	α Virginis	1.1	13 20 36.45	—10 4 2 2 7.1
34	b Scorpii	4.8	15 45 44.59	—25 29 15.5
35	A Scorpii	4.7	15 48 23.15	-25 4 5.3
36	π Scorpii	4.I	15 53 35.11	-255152.3
37	σ Scorpii	3.1	16 15 53.84	-25 23 5.7
38	α Scorpii	1.2	16 24 4.22	-26 14 23.3
39	22 Scorpii	4.9	16 24 55.17	-24 55 28.3
40	τ Scorpii	2.9	16 30 27.81	-28 2 11.1
41	X Sagittarii	var.	17 42 5.00	-274755.3
42	W Sagittarii	var.	17 59 27.75	-29355.6
43	Boss 4577	4.7	18 2 34.33	-28 28 3.6
44	8 Sagittarii	2.7	18 15 25.46	29 51 57.4
45	φ Sagittarii	3.2	18 40 13.30	-27 4 52.0
46	τ Sagittarii	3-3	19 1 30.58	-27 47 54.7
47	h Sagittarii	4.6	19 31 24.86	-25 4 35.2
48	ω Sagittarii	4.8	19 50 30.75	$-26\ 31\ 51.6$
49	A Sagittarii	5.0	19 53 39.26	$-26\ 25\ 54.8$
50	η Capricorni	5.0	20 59 27.33	20 11 59.0
51	γ Capricorni	3.6	21 35 16.37	-17 3 20.7
52	ò Capricorni	2.8	21 42 14.44	16 31 21.3
53	ι Aquarii	4.2	22 1 44.41	—14 17 31.8
54	σ Aquarii	4.9	22 26 2.66	—11 7 2 4.9
55	λ Aquarii	3.8	22 48 4.60	8 2 34.2
56	φ Aquarii	4-4	23 9 49.02	- 6 3I 5.5

STERNBEDECKUNGEN.

35 3 37 3 38 3 39 3 50 9	Jan. 6 16.2 18 23.3 21 57.0 22 19.2 0 26.0 18 38.8 22 17.1	+1.04co -0.2983 +0.1922 -1.2628 -1.3062	5481 5532 5544 5545 5192	-1526 -1242 -1154 -1145	38	Jan. d h m 31 3 31.6	-0.0258	5521	
37 3 38 3 39 3 50 9 51 9	18 23.3 21 57.0 22 19.2 0 26.0 18 38.8	-0.2983 +0.1922 -1.2628 -1.3062	5532 5544 5545	-1242 -1154	38	31 3 31.6	-0.0258	5521	
38 3 39 3 50 9 51 9	21 57.0 22 19.2 0 26.0 18 38.8	+0.1922 -1.2628 -1.3062	5544 5545	-1154				3344	-1133
39 3 50 9 51 9	22 19.2 0 26.0 18 38.8	-1.2628 -1.3062	5545	- 1		Febr.			
50 9 51 9	o 2 6.0	-r.3062	00.0	- 1145			- 6		0
51 9	18 38.8		5192		41	1 13 10.1	-0.6915	5569	-0248
,	,	-1.2407	,	+1809	42	1 20 38.4	+1.1455	5564	0046
52 9	22 17.1	- 177	5071	+2076	43	1 21 58.8	-0.0771	5563	0010
		- 1.0780	5049	+-2122	45	2 14 18.4	-1.2575	5527	+0424
53 10	8 37.8	-1.2975	4992	+2241	46	2 23 40.3	+0.0394	5492	0664
,	22 21.0	-o.858o	4841	-1-2531	56	8 4 50.9	-0.6691	4850	+2554
2 14	11 54.2	-0.2112	4909	+2572	2	10 1 6.8	-0.9395	4444	+2401
3 16	22 38.2	0.9108	5370	+2019	2	10 18 41.9	+0.0554	4889	+2568
4 17	5 44.6	+0.7663	5446	+1898	3	13 6 33.2	-0.6638	5293	+1987
5 17	8 32.9	+1.1728	5478	+1846	4	13 13 51.5	-1.0306	5365	+1865
2. 1	18 44.6	-0.1835	5590	+1638	6	14 3 14.8	+0.0530	5495	+1604
,	18 52.8	-0.5293	5591	+1636	7	14 3 23.2	-0.2982	5496	+1602
8 17	19 8.6	-0.3840	5594	-+ 1630	8	14 3 39.5	-0.1508	5499	+1596
9 17	19 21.7	+0.0861	5596	+1625	9	14 3 53.0	+0.3261	5501	+1591
,	19 50.9	+0.0002	5602	+-1615	10	14 4 23.1	+0.2383	5506	+1580
11 17	20 33.4	+0.1644	5609	+1599	11	14 5 7.0	+0.4043	5514	+1565
13 18	10 15.4	+0.4410	5758	+1265	12	14 18 18.3	-1.2437	5644	+1256
14 19	10 44.5	-0.4880	5981	+0538	13	14 19 15.2	+-0.6673	5654	+1232
15 19	20 43.2	+0.8318	6044	+0204	14	15 20 32.4	-0.3134	5874	+0515
16 20	4 42.1	-1.0565	6077	-0073	15	16 6 50.1	+1.0088	5936	+0185
17 20	11 51.9	+0.2386	6096	0326	16	16 15 3.2	-0.9192	5974	-0088
18 21	6 3.3	−0.8156	6083	096 1	17	16 22 25.2	+0.3798	5999	-0339
19 21	7 21.3	-1.2653	6079	-1005	18	17 17 3.3	-0.7202	6006	-0969
20 21	7 31.7	-1.0835	6079	-1011	19	17 18 23.0	-1.1755	6003	
21 21	9 45.6	-0.3239	6070	1086	20	17 18 33.6	-0.9932	6004	-1019
23 21	16 10.3	-0.9900	6042	- 1296	2.1	17 20 50.1	-0.2311	6000	-1094
24 22	10 50.1	+1.1762	5925	-1848	23	18 3 22.0	0.9148	5982	-1304
26 24	14 35.2	-0.6006	5501	2768	24	18 22 15.9	+1.2220	5891	-1860
28 24	21 37.7	+0.5886	5452	-2821	26	21 1 44.8	-0.6707	5551	
29 25	4 54.7	-0.1943	5408	-2860	28	21 8 39.0		5513	6
31 25	18 31.4	+0.1112	5340	-2892	29	21 15 46.1	-0.2985	5478	
33 27	15 26.5	+0.5542	5266	2662	31	22 5 0.9	0.0231	5425	
35 30	11 50.7	+0.7938	5469	-1509	33	24 0 24.5	+0.3516	5379	-2723
36 30	14 8.9	+1.3027	5478	-1455	34	26 17 27.4	4.5		
	23 57.6	1	5509	-1222	35	26 18 35.9		5529	2.7

Nr.	Zeit der Konj. in AR.	q	<i>p</i> '	q'	Nr.	Zeit der Konj in AR.	q	p'	q'
	Febr.					März			
36	d h m 26 20 50.9	+1.0850	5535	- 1467	31	d h m 21 16 20.9	-0.0352	5434	-2969
37	2 7 6 2 6.6	-0.7135	5558	1226	33	23 11 10.7	+0.3045	5440	-2764
38	27 9 56.4	-0.2205	5564	1136	34	26 2 18.9	+1.1197	5624	-1576
41	28 19 7.1	-0.8576	5574	0239	35	26 3 25.3	+0.5126	5626	-1548
1		-15/-	3317	37	36	26 5 35.9	+1.0092	5631	1492
	März					3 337			
10		100760	61	0006	37	26 14 53.6	-0.7635	5650	1246
42	I 2 32.3	+0.9760	5561	-co36	38	26 18 17.0	-0.2773	5654	-1154
43	1 3 52.2	-0.2393	5560	0000	41	28 2 34.0	-0.9036	5639	-0240
46	2 5 29.6	-0.0980	5472	+0674	42	28 9 49.3	+0.9108	5617	-0034
48	3 3 39.7	+0.5935	5358	+1197	43	28 11 7.5	0.2911	5614	+0003
49	3 5 7.2	+0.6607	5349	+1228	44	28 16 32.2	+1.2575	5594	+0153
50	4 12 50.6	-1.3412	5161	+1835	46	29 12 18.8	0.1459	5501	+0680
51	5 7 10.6	-1.2162	5054	+2106	48	30 10 15.1	+0.5472	5366	+ 1202
52	5 10 50.0	-1.0308	5034	+2153	49	30 11 41.9	+0.6146	5356	+1234
2	10 0 34.9	+0.1529	4906	+2586					
3	12 12 36.9	-0.5455	5273	+1982		April			
4	12 20 0.4	+1.1630	5336	+1856	51	1 13 38.0	-1.2417	5040	+2103
6	13 9 36.1	-+0.1760	5450	+1592	52	1 17 17.5	-1.0559	5019	+2150
7	13 9 44.6	0.1788	5451	+1589	53	2 3 41.2	-1.2340	4969	+2271
8	13 10 1.2	-0.0300	5454	+1583	56	3 17 25.9	- 0.6547	4852	+2571
9	13 10 14.9	+0.4517	5458	+1579	3	8 18 15.0	-0.5622	5308	+1992
10	13 10 45.6	+0.3629	5462	+-1568	4	9 1 35.3	+1.1432	5366	+1864
11	13 11 30.3	+0.5309	5468	1552	6	9 15 6.7	+0.1548	5474	+1597
12	14 0 57.9	-1.1402	5584	1242	7	9 15 15.2	-0.2002	5476	+1594
13	14 1 56.1	+0.7947	5590	-1218	8	9 15 31.8	-0.0515	5478	+1588
_									
14	15 3 54.8	-0.2086	5779	-1-0504	9	9 15 45.5	+0.4304	5479	+1583
15	15 14 32.4	+1.1300	5833	+0178	10	9 16 16.1	+0.3416	5484	+1572
16	15 23 2.5	-0.8346	5866	0092	11	9 17 0.6	+0.5093	5489	+1556
17	16 6 40.3	+0.4824	5882	-0337	12	10 6 27.0	-1.1673	5594	+1242
18	17 1 59.6	0.6482		0956	13	10 7 25.3	+0.7723	5600	+1218
19	17 3 22.1	-1.1130	5884	1000	14	11 9 31.8	-0.2393	5760	+0500
20	17 3 33.2	-0.9 2 68	5884	1005	15	11 20 16.8	+1.1072	5800	+0175
21	17 5 54.8	-0.1532	5880	-1079	16	12 4 54.6	-0.8752	5821	-0093
23	17 12 41.0	0.8533	5864	-1286	17	12 12 40.8	+0.4531	5829	0336
24	18 8 14.7	+1.3030	5786	-1836	18	13 8 27.0	0.6934	5810	945
26	20 12 56.9	-0.6607	5516	-2807	19	13 9 51.8	-1.1643	5806	- c987
28	20 19 55.3	-+0.5002	5490	-2871	20	13 10 3.2	-0.9758	5806	-0993
29	21 3 5.3	-0.2991	5465	-2920	2.1	13 12 28.6	-0.1923	5801	-1065
	, , , ,	,,	7. 3		1		1		

STERNBEDECKUNGEN.

Nr.	Zeit der Konj. in AR.	q	p'	q'	Nr.	Zeit der Konj. in AR.	q	p'	q'
	April					Mai			
23	13 19 26.6	-0.9028	5777	-1267	29	14 19 55.2	-0.4756	5305	-2820
24	14 15 38.0	+1.2850	5686	-1802	31	15 9 55.7	0.1822	5286	-2871
26	16 22 10.6	-0.6992	5425	-2756	33	17 6 32.6	+0.2604	5372	2704
28	17 5 22.2	+0.4812	5404	-2822	34	19 21 56.3	+1.2255	5698	-1573
29	17 12 44.7	-0.3258	5385	2873	35	19 23 1.6	+0.6230	5700	-1545
31	18 2 20.9	-0.0513	5369	-2929	36	20 I 9.8	+1.1215	5711	-1489
33	19 21 46.7	+0.3181	5434	2754	37	20 10 15.9	-0.6187	5744	1244
34	22 12 21.8	+1.1670	5692	1589	38	20 13 34.4	0.1286	5753	1151
35	22 13 27.0	+-0.5649	5695	-1561	41	21 20 54.1	-0.6807	5762	0226
36	22 15 35.1	-1.0588	5703	-1505	42	22 3 54.8	+1.1222	5745	0017
37	23 0 41.2	-0.6936	5724	-1257	43	22 5 10.3	-0.0606	5740	+0020
38	23 4 0.2	-0.2099	5730	-1162	45	22 20 35.8	1.1632	5669	+0465
41	24 11 32.5	-0.8128	5718	-0238	46	23 5 30.6	+0.1253	5614	+0708
42	24 18 37.7	+0.9868	5695	0030	48	24 2 46.7	+0.8406	5459	+1232
43	24 19 54.1	-0.2024	5690	+0007	49	24 4 11.1	+0.9092	5448	+1264
46	25 20 33.0	-0.0487	5562	+0691	50	25 11 4.4	-1.0205	5194	+1854
48	2 6 1 8 6.4	+0.6452	5409	+1212	51	26 5 9.0	o .88 60	5061	+2111
49	26 19 31.9	+0.7127	5398	1244	52	26 8 46.4	0.7010	5039	+2156
50	28 2 46.8	-1.2550	5162	+1839	53	26 19 5.3	0.8782	4974	+2268
51	28 21 0.2	-1.1298	5041	+2101	54	27 8 16.9	1.3030	4908	+2389
52	29 0 38.9	-0.9454	5020	+2147	56	28 8 47.4	-0.3295	4833	+2546
53	29 11 0.9	-1.1257	4963	+ 2265	1	30 14 22.4	-1.3640	4891	+2597
	М				2	30 22 15.0	+0.3335	4927	+2569
-6	Mai	0.1644	.0	10550					
56	1 0 45.4	-0.5672	4842			Juni			
3	1 21 17.6	+0.8884	4514	2495	18	6 20 12.3	0.9995	5890	-0979
2	3 14 1.0	+0.1682	4942	+2592	21	7 0 9.6	0.5118	5871	1098
14	8 15 14.9	-0.3512	5810	+0494	23	7 7 1.4	1.2340	5837	1298
15	9 1 52.6	+0.9814	5846	+0167	24	8 3 3.8	+0.9088	5708	-1823
16	9 10 25.9	-1.0022	5860	0101	26	10 10 27.8	—1.12 60	5340	2 704
17	9 18 8.8	+0.3172	5861	-0345	28	10 17 53.9	+0.0775	5308	-2759
18	10 13 51.9	-0.8434	5820	-0952	29	11 1 32.8	-0.7350	5280	2802
20	10 15 28.1		5814	1000	31	11 15 42.7	-0.4340	5249	2843
21	10 17 53.8	-0.3443	5805	1071	33	13 13 8.0	+0.0723	5306	-2656
23	11 0 53.2	_1.0612	5774	-1271	34	16 5 49.9	+1.1865	5650	-1536
24	11 21 14.8	1.1280	5658	-1796	35	16 6 56.3	0.5828	5656	1509
26	14 4 56.1	-0.8658	5348	-2709	36	16 9 6.6	+1.0901	5664	-1454
28	14 12 19.8	+0.3356	5324	-2771	37	16 18 20.9	-0.6426	5704	-1212

Nr.	Zelt der Konj. in AR.	q	p'	q'	Nr.	Zeit der Konj. in AR.	q	p'	q'
	Juni					Juli			
38	16 21 42.2	-0.1410	5718	1120	37	d h m	-0.7854	5651	-1181
41	18 5 20.2	-0.6230	5754	-0203	38	14 4 5.7	-0.2731	5664	-1090
42	18 12 23.0	+1.2017	5740	+-0005	41	15 12 12.3	-0.6890	5709	0180
43	18 13 38.9	+0.0182	5737		42	15 19 21.1	+1.1628	5698	+0027
45	19 5 6.7	-1.0530	5680	+0486	43	15 20 38.0	-0.0253	5695	+0064
46	19 14 1.6	+0.2569	5631	-1-0730	45	16 12 17.1	1.0670	5645	+0506
48	20 11 14.9	+1.0155	5481	+1256	46	16 21 17.5	+0.2696	5604	+0749
49	20 12 39.0	+1.0872	5471	1287	48	17 18 41.1	+1.0792	5469	+1275
50	21 19 23.8	-0.7827	5221	1878	49	17 20 5.7	+1.1538	5458	+1306
51	22 13 23.2	-0.6197	5083	+2132	50	19 2 57.8	-0.6515	5223	+1899
52	22 16 59.6	-0.4297	5059	-2175	51	19 20 58.5	0.4496	5092	+2154
53	23 3 16.2	-0.5939	4993	2287	52	20 0 35.1	0.2520	5070	+2198
54	23 16 25.9	-1.0048	4921	+2403	53	20 10 51.7	-0.3959	5001	+2308
55	24 4 39.5	-1.4213	4868	-+-2485	54	21 0 1.4	-0.7832	4930	+2422
56	24 16 56.4	-0.0157	4831	+2548	55	21 12 15.2	-1.1810	4877	+2503
1	26 22 49.7	-1.0740	4863	-+2574	56	22 0 32.9	+0.2412	4834	+2561
2	27 6 46.5	+0.6203	4896	+2543	I	24 6 42.7	-0.7842	4840	+2564
3	29 18 3.8	0.3789	5342	+1953	2	24 14 44.3	+0.9182	4869	-1-2529
4	30 1 16.5	1.2707	5413	+1828	3	27 2 54.6	-0.1403	5284	+1922
6	30 14 29.8	+0.2170	5549	+1563	6	27 23 41.9	+0.4271	5488	+1532
7	30 14 38.1	-0.1349	5550	+1560	7	27 23 50.4	+0.0725	5489	+1530
8	30 14 54.2	+0.0107	5552	+ 1554	8	28 0 6.8	+0.2188	5491	+1524
9	30 15 7.5	+0.4857	5555	+1549	9	28 0 20.3	+0.6968	5495	+1519
10	30 15 37.3	+0.3951	5559	+1538	10	28 0 50.6	+0.6046	5498	+1508
11	30 16 20.7	+0.5566	5565	+1522	11	28 1 34.7	+0.7662	5505	+1492
	I1:				12	28 14 50.4	0.9954	5636	+1181
	Juli				13	28 15 47.6	+0.9210	5644	+1157
12	1 5 23.8	-1.1695	5694	+1210	14	29 17 16.7	-0.2663	5853	+0435
13	1 6 20.2	+0.7363	5701	+1184	15	30 3 40.9	+0.9835	5913	+0106
2 6	7 16 45.5	—1. 3 680	5400	2746	16	30 12 0.2	-1.0238	5946	-0167
28	8 0 2.9	0.1859	5362	2796	17	30 19 28.5	+0.2267	5965	-0415
29	8 7 33.6	- 0.9992	5329	-2835					
30	8 10 45.6	+1.2753	5315	-2847		Aug.			
31	8 21 30.8	-0.7112	5283	-2866	28	4 8 13.4	- 0.3477	5445	-2858
33	10 18 40.4	-0.1961	5298	-2643	29	4 15 30.9	-1.1621	5412	2895
34	13 11 58.8	+1.0306	5596	-1503	30	4 18 37.2	+1.0742	5400	-2907
35	13 13 6.2	+0.4240	5601	-1476	-31	5 5 3.3	0.8995	5368	-2924
36	13 15 18.4	+0.9398	5611	-1423	33	7 1 0.4	-0.4261	5355	- 2674

STERNBEDECKUNGEN.

Nr.	Zeit der Konj. in AR.	q	p'	q'	Nr.	Zeit der Konj. in AR.	q	p'	q'
	Aug.					Aug.			
34	9 17 29.6	+0.8296	5589	-1492	23	28 11 18.7	-1.2405	5871	1366
35	9 18 36.8	+0.2256	5594	1465	24	29 6 52.2	+0.7567	5796	-1910
36	9 20 48.9	+0.7430	5602	1410		, ,	, ,,,	217	
37	10 6 11.7	-0.9700	5634	-1166		Sept.			
38	10 9 36.4	-0.4540	5642	-1074	33	3 9 27.2	-0.5305	5450	-2729
40	10 12 16.2	1.1632	5650	1002	34	6 o 1.1	+0.6983	5652	-1508
41	11 17 53.9	-0.8296	5670	-0164	35	6 1 6.8	+0.1014	5656	-1479
42	12 1 6.4	-1.0380	5658	+0042	36	6 3 15.9	+0.6136	5661	-1423
43	12 2 24.0	-0.1521	5655	+-0079	37	6 12 27.0	-1.0790	5682	-1174
45	12 18 12.5	-1.1747	5604	+0518	38	6 15 47.9	-0.5674	5688	1081
46	13 3 18.8	+0.1811	5561	+0760	40	6 18 24.8	+1.0354	5691	-1007
48	14 0 55.8	+1.0290	5434	+1284	41	7 23 39.7	0.9305	5680	-0160
49	14 2 21.2	+1.1060	5425	+1316	42	8 6 49.2	+0.9314	5661	+0047
50	15 9 29.3	-0.6524	5205	+ 1910	43	8 8 6.3	-0.2526	5655	+0084
51	16 3 36.4	0.4176	5084	+2166	45	8 23 51.5	-1.2645	5594	+0523
52	16 7 14.0	-0.2129	5059	+2211	46	9 8 57.5	+0.0931	5545	+0764
53	16 17 33.0	-0.3393	4998	-+-2323	48	10 6 37.7	+0.9544	5406	+1285
54	17 6 45.0	0.7045	4931	+2438	49	10 8 3.5	+1.0325	5398	+1316
55	17 19 0.0	-1.0832	4880	+2520	50	11 15 21.9	-0.7045	5179	+1908
56	18 7 18.6	+0.3633	4841	+2578	51	12 9 35.5	0.4554	5059	+2165
I	20 13 35.1	-0.6096	4838	2569	52	12 13 14.3	-0.2477	5039	+2209
2	20 21 39.2	+1.1055	4861	+2532	53	12 23 36.5	0.3659	4981	+2324
3	23 10 33.9	+0.0436	5232	+1901	54	13 12 51.6	-0.7220	4919	+2441
6	24 7 47.4	+0.6057	5422	-4-1510	55	14 г 8.7	-1.0912	4873	+2525
7	24 7 56.0	+0.2467	5420	1506	56	14 13 28.4	+0.3658	4841	+2585
8	24 8 12.8	+0.3945	5422	-1-1500	1	16 19 41.6	-0.5769	4851	+2581
9	24 8 26.6	+0.8780	5425	+1495	2	17 3 45.0	+1.1435	4874	+2543
10	24 8 57.7	+0.7844	5429	+1485	3	19 16 49.1	+0.0902	5219	+1897
11	24 9 42.7	+0.9474	5436	+-1469	6	20 14 17.6	+0.6559	5384	+1499
12	24 23 17.7	-0.8448	5556	+1158	7	20 14 26.4	+0.2942	5385	+1497
13	25 0 16.4	1.0935	5565	+1134	8	20 14 43.4	+0.4431	5389	+1491
14	26 2 25.0	0.1316	5764	+0420	9	20 14 57.4	+0.9308	5390	- <u></u> -1486
15	2 6 13 5.3	+1.1215	5825	1-0095	10	20 15 28.9	+0.8364	5394	+1474
16	26 21 37.1	-0.9168	5861	-0175	11	20 16 14.7	1.0008	5400	+1458
17	27 5 16.0	+0.3385	5881	0420	12	21 6 3.9	0.8108	5505	+1147
18	2 8 o 36.9	-0.9502	5891	1038	13	21 7 3.7	+1.1480	5513	+1125
20	28 2 10.6	-1.2408	5889	-1086	14	22 9 49.4	0.0955	5688	+0413
21	28 4 32.3	-0.4876	5886	1160	15	22 20 47.8	+1.1732	5737	+0091

Nr.	Zeit der Konj. in AR.	q	p'	q'	Nr.	Zeit der Konj. in AR.	q	p'	q'
	Sept.					Okt.			
16	23 5 35.2	-0.8970	5764	-0174	11	17 21 51.7	+0.9265	5419	+1457
17	23 13 28.7	+0.3749	5782	-0415	12	18 11 41.2	-0.8972	5516	+1143
18	24 9 28.1	0.9386	5785	1022	13	18 12 41.1	+1.0675	5522	+1119
20	24 11 4.9	-1.2338	5784	-1070	14	19 15 37.1	-0.1919	5669	+0406
21	24 13 31.4	0.4696	5779	-1142	15	20 2 44.0	+1.0838	5706	+-0087
23	24 20 31.3	-1.2353	5766	1344	16	20 11 40.0	-1.0080	5724	0176
24	25 16 42.1	+0.7847	5700	188I	17	20 19 42.7	+0.2747	5730	-0414
2	27 9 27.9	+1.3273	5075	-2518	18	21 16 11.3	-1.0590	5709	1010
					21	21 20 21.4	-0.5846	5701	-1127
	Okt.				24	23 0 24.9	+0.6893	5599	-1846
34	3 8 37.7	+0.6977	5753	-1533	27	25 13 22.0	+1.3247	5391	-2819
35	3 9 41.2	+0.1099	5757	-1504	28	25 15 19.8	-0 . 46 2 9	5391	-2835
36	3 11 46.2	+0.6147	5762	-1446	29	25 22 43.3	-1.2827	5385	-2885
37	3 20 39.8	-1.0512	5780	-1192	30	26 1 51.0	+0.9594	5384	-290I
38	3 23 54.5	0.5465	5783	-1097	31	26 12 16.6	1.0160	5389	2937
40	4 2 26.6	1.0332	5785	-1022	37	31 6 43.2	-0.9376	5864	-1199
41	5 6 53.0	-0.9006	5748	0160	38	31 9 53.1	-0.4347	5870	-1105
42	5 13 52.3	+0.9400	5725	+0049	40	31 12 21.4	+1.1302	5875	1027
43	5 15 7.8	-0.2301	5719						
45	6 6 34.1	-1.2297	5638	+0529		Nov.			
46	6 15 31.2	+0.1157	5582	+0770	41	1 16 2.4	-0.7550	5844	-0155
48	7 12 56.0	+0.9738	5422	+1289	42	1 22 50.4	+1.0685	5816	+0057
49	7 14 21.1	+1.0520	5410	+1320	43	2 0 3.8	-0.0860	5810	+-0095
50	8 21 30.4	-0.6757	5169	+1903	45	2 15 5.8	-1.0622	5721	+0542
51	9 15 43.8	-0.4298	5047	+-2158	46	2 23 49.6	+0.2728	5656	+0785
52	9 19 22.7	-0.2230	5023	+2202	48	3 20 46.0	+1.1342	5480	+1304
53	10 5 45.9	-0.34 3 3	4964	+2313	49	3 22 9.4	+1.2120	5468	+1335
54	10 19 2.6	-0.7021	4904	+2431	50	5 4 49.2	-0.4906	5198	+1912
55	11 7 21.1	-1.0755	4862	+2515	51	5 22 51.8	-0.2478	5059	+2159
56	11 19 41.9	+0.3757	4832	+2576	52	6 2 29.2	-0.0432	5035	+-2202
I	14 1 49.6	-0.5954	4866	+-2582	53	6 12 48.7	-0.1661	4972	2310
2	14 9 50.6	+1.1170	4893	+2546	54	7 2 2.4	-0.5306	4903	+2422
3	16 22 31.1	+0.0264	5247	1900	55	7 14 19.7	-0.9118	4856	+2502
6	17 19 54.8	+0.5811	5405	-1499	56	8 2 40.0	+0.5239	4823	+2561
7	17 20 3.5	+0.2186	5408	+1495	1	10 8 46.1	-0.5196	4867	+2567
8	17 20 20.6	+0.3677	5408	+1490	2	10 16 45.7	+1.1755	4898	+2532
9	17 20 34.6	+0.8560	5410	+1484	3	13 4 58.5	-0.0214	5286	+1896
10	17 21 6.0	+0.7612	5414	-⊢ 147 3	6	14 2 6.5	+0.4946	5454	+1494

STERNBEDECKUNGEN.

Nr.	Zeit der Konj in AR.	q	p'	q'	Nr.	Zeit der Konj. in AR.	q	p'	q'
	Nov.					Dez.			
7	d h m	+0.1336	5453	+1491	2	8 0 45.2	+1.4028	4882	+2506
8	14 2 31.9	+0.2815	5456	+1485	3	10 12 55.4	+0.0671	5294	+1875
9	14 2 45.7	+0.7670	5459	+1480	6	II 9 53.9	+0.5276	5479	+1476
10	14 3 16.8	+0.6722	5462	+1469	7	11 10 2.5	+0.1678	5479	+1473
11	14 4 1.9	+0.8344	5469	+1452	8	11 10 19.1	+0.3145	5482	+1468
12	14 17 40.7	-1.0020	5566	+1137	9	11 10 32.8	+0.7970	5484	+1463
13	14 18 39.8	+0.9528	5574	+1112	10	11 11 3.6	+0.7012	5488	+1451
14	15 21 17.2	-0.3397	5715	+0395	ΙI	11 11 48.2	+0.8606	5495	+1435
15	16 8 18.2	+0.9184	5747	+0074	12	12 1 17.8	0.9992	5605	+1120
16	16 17 10.6	-1.1811	5760	-0190	13	12 2 16.2	+0.9414	5613	+1096
17	17 1 11.2	+0.0912	5759	-0428	14	13 4 29.5	-0.4064	5773	+0375
18	17 21 39.6	-1.2677	5718	1020	15	13 15 18.9	+0.8162	5811	+0051
21	18 1 50.8	-0.7962	5700	-1135	17	14 7 52.9	-0.0421	5825	-0456
24	19 6 11.5	+0.4633	5566	-1838	21	15 8 4.9	-0.9748	5768	-1168
27	21 20 42.9	+1.1220	5302	-2762	3	15 10 50.4	+1.0192	5887	1288
28	21 22 44.7	-0.6915	5299	-2777	22	15 11 33.9	+1.1682	5754	-1265
30	22 9 37.4	+0.7658	5288	-2837	24	16 11 59.0	+0.2207	5614	1870
31	22 20 24.6	-1.2258	5294	-2869	25	18 13 5.2	+1.1598	5331	2 646
33	24 16 21.1	-0.6279	5445	-2688	27	19 2 19.6	+0.8175	5281	2752
45	30 0 54.0	-0.8674	5789	+0565	28	19 4 22.5	-1.0040	5 2 79	2766
46	30 9 28.5	+0.4732	5728	+0810	30	19 15 22.7	+0.4623	5254	2815
47	30 21 51.7	-1.1890	5622	+1137	32	21 8 52.4		5301	-2751
	15				33	21 23 17.5		5365	_2630
	Dez.				34	24 13 57.0		5762	-1473
50	2 13 29.8	-o. 2 058	5252	+1938	35	24 15 0.8	+0.1635	5770	
51	3 7 16.1	+0.0519	5101	+2180	36	24 17 6.0	+0.6830	5781	-1389
52	3 10 50.6	+0.2579	5073	+-2221	37	25 1 58.2	-0.9322	5822	-1141
53	3 21 2.7	+0.1415	5000	+2324	50	29 22 41.2	+0.0309	5292	+1971
54	4 10 8.8	0.2174	4921	+2429	51	30 16 16.4		5141	+2212
55	4 22 21.0	0.5976	4867	+2504	52	30 19 48.7	+0.5348	5113	+2253
56	5 10 37.9	+0.8287	4826	+2556	53	31 5 54.5	+0.4364	5039	+2353
1	7 16 44.6	0.2762	4851	+2542	54	31 18 53.0	+0.0980	4954	

Sternbedeckungen für Berlin 1913.

Tag	Nr.	Name	Eintritt mittl.Zeit	Q_1	Austritt mittl. Zeit	Q_2	Bemerkungen
Jan. 17 18 20 27 Febr. 21	4 13 17 33 28	ζ Arietis χ Tauri 49 Aurigae α Virginis χ Leonis	4 28. r 10 17.2 11 54.1 14 9.7 7 7.5	77.9 82.9 45.8 96.8	5 34.9 11 28.8 12 36.7 15 8.9 8 2.7	225.6 255.4 330.2 334.6 290.2	©Untg. 4 16 (i. Mer. 8 22 (i. Mer. 10 27 (i. Mer. 16 56 (Aufg. 6 5
26 März 13 13 15	34 9 11 15	b Scorpii 23 Tauri	17 14.9 11 0.4 12 10.0 15 6.8 5 58.9	158.1 43.6 41.8 155.5 109.6	18 7.5 11 44.0 12 49.6 15 28.4 7 12.1	243.2 298.0 300.1 210.1 257.7	((i. Mer. 17 20) ((Untg. 12 45) ((Untg. 15 15) (OUntg. 6 3)
April 10 Mai 17 Juni 16 18	13 36 33 36 42	χ Tauri π Scorpii α Virginis . π Scorpii W Sagittarii .	8 10.6 15 37.6 5 3.6 8 23.8 12 2.0	140.8 111.8 55.6 154.8 141.1	8 44.2 16 49.0 5 26.8 9 17.2 12 50.8	207.7 276.2 8.7 249.7 217.5	⊙Untg. 6 47 《Untg. 17 21 《Aufg. 4 33 ⊙Untg. 8 22 《i. Mer. 12 13
20 20 Juli 28 Aug. 24 Sept. 8	48 49 13 11 42	 Sagittarii . A Sagittarii . χ Tauri Tauri W Sagittarii . 	9 44.9 11 27.4 14 14.2 8 29.5 6 9.3	88.9 92.0 101.1 60.9 77.5	10 55.5 12 43.0 15 4.6 9 16.7 7 28.1	254.2 241.8 221.0 265.4 281.4	《 Aufg. 10 34 《 i. Mer. 14 2 ⊙ Aufg. 16 16 《 Aufg. 9 10 ⊙ Untg. 6 32
10 14 20 20 20	49 56 6 7 8	A Sagittarii . φ Aquarii 17 Tauri 19 Tauri 20 Tauri	7 7.7 14 15.0 13 4.0 13 58.2 13 49.0	79.0 3.3 77.9 356.6 45.3	8 28.9 15 0.0 14 16.6 14 25.2 15 1.0	247.2 284.4 233.0 315.1 267.1	(i. Mer. 8 38 (Untg. 17 12 (i. Mer. 15 45
Okt. 14 Nov. 16 Dez. 11	2 15 6 8	ε Piscium 136 Tauri 17 Tauri 20 Tauri η Tauri	8 23.0 6 51.9 9 3.3 9 53.5 10 50.9	93.6 115.3 72.3 36.4 135.3	9 18.4 7 36.5 10 20.7 10 59.5	193.9 229.8 243.5 282.6 187.5	
13 16 19	15 24 30 53	7 Tauri γ Cancri t Leonis t Aquarii	16 9.9 10 35.7 13 57.1 6 38.4	175.4 54.1 110.8 19.8	16 22.7 11 16.3 15 1.3 7 31.4	198.0 337.2 316.4 274.3	(i. Mer. 12 12 (i. Mer. 15 5 (i. Mer. 17 35

Geoz.	Obe Jere			$\frac{b}{a}$	Geoz. 6 Mitt				$\frac{b}{a}$	Geoz. Mit	Obe tlere			$-\frac{b}{a}$
				(HI T	\mathbf{T}	RA	B	ANT	I.					
Jan.	I	1 1	27.5	-o.o 38 6	März	21	ь 17	51.0	-0.0317	Juni	9	8 ^h	32.9	-0.0 2.8 6
	2		57.8	384		23		20.1	316		II		59.0	286
	4		28.3	383		25		49.0	315		12		25.2	286
	6	8	58.6	382		27		17.9	313			15	51.3	286
	8	3	29.0	380		28		46.7	311		-		17.5	286
	9		59.3	379		30	_	15.5	310		18		43.4	286
	II	-	29.7	377	April	ī		44.0	309		19	23	9.6	286
	13		59.9	376		3	3	12.7	308		-	17	35.6	286
	15	5	30.2	375		4		41.2	306		23	12	1.6	286
	17	0	0.5	373		6	16	9.8	305		25	6	27.5	280
	18		30.8	371		8		38.2	304		27	0	53.5	286
	20	13	I.0:	369		10	5	6.7	304		28		19.3	28
	22	7	31.3	368		ΙI		35.0	303		30	13	, ,	28
	24	2	1.5	366		13	18	3.2	302	Juli	2	0	11.2	28
	25	20	31.6	365		15	12	31.4	301		4	2	37.3	28
	27	15	1.7	363		17		59.6	300		5	21	3.I	28
	29	9	32.0	361		19		27.6	299		7	15	29.2	28
	3T	4	2.0	360		20		55.6	298		9	9	55.T	28
Febr.			32.1	358		22		23.4	297		11		21.1	28
. 0.7.	3	17	2.1	356		24	8	51.3	297		12		47.0	28
	5	II	32.2	355		26		19.1	296	1	14	17		28
	7	6	2.2	353		27	~	46.8	295		16	11	39.1	28
	9	0	32.2	351		29		14.4	294		18	6	5.2	28
	10	19	2.1	350	Mai	I	10		293		20		31.2	28
	12	_	32.1	348		3	5	9.6	292		21	18		28
	14	8	1.9	347		4	2 3	37.2	291		23	13	٠, .	28
	16	2	31.7			6	18	4.5	290		25	_	49.7	28
	17	21	1.5	345		8	12	31.8	290		27		15.8	28
			_	344		10		59.1	289		28		42.2	28
	19 21	15	31.4	342		12		26.4	289		30	15	8.5	2,8
		4	-	341		13			288	Aug	_	9		28
	23 24		0.4	340 338		15	19	20.5	288	,	3	4	1.4	28
	26	23 17		337		17	8	47.5	288		3 4	22		28
	28	II	,	336 336		19	3	14.5	288		6			28
März			29.2		1		_	41.2	287		8		21.1	28
141 501 72				334				8.0	287		10	1		28
	4		58.7 28.2	332		22		34.8	287 287		12		47·7 14·5	28
	5			331					287 287				41.3	28
	7		57.6	3 2 9		26		1.4 28.0	287		13			28
	9		26.9	328					287		_			28
	II		56.1	327				54.6	287		17		35.0	2,8
	12		25.4	325	Tun:			21.1						28
	14	1 -	54.6	324	Juni	2		47.5	287				29.1	
			23.9	323		4		13.9	287		22		56.3	28
	18		52.9	321		5		40.3	286		24		23.5	2,8
	19	123	22.0	319	I	7	14	6.6	286		20	3	50.8	2

		ere Konj. e Zeit	$\frac{b}{a}$	Geoz. Obe	U	<u>b</u>		ere Konj. ce Zeit	$\frac{b}{a}$
717	LLICI	e Zeit	u	Mitter	e Zeit	a			
			${ m T}$	RABAN	T 1.	(Fortsetzur	g.)		
Aug	. 27	22 18.I	—ა.o 2 86	Okt. 9	9 35.9	0.0269	Nov. 20	21 26.2	-0.0237
0	29	16 45.6	285	11	4 5.0	268	22		235
	31	11 13.2	285	12	22 34.0	267	24		234
Sept.	. 2	5 40.8	285	14	17 3.2	266	26	4 56.5	232
	4	0 8.4	284	16	11 32.5	266	27	23 26.7	230
	5	18 36.2	284	18	6 1.7	265	29	17 56.9	228
	7	13 4.0	283	20	0 31.0	263	Dez. 1	12 27.0	226
	9	7 32.0	282	2.1	19 0.4	262	3	6 57.3	224
	11	1 59.8	282	23	13 29.9	2 61	5	1 27.6	222
	12	20 27.9	281	25	7 59.3	260	6	19 57.9	220
	14	14 55.9	280	27	2 28.8	259	8	14 28.2	218
	16	9 24.0	280	28	20 58.4	257	10	8 58.4	216
	18	3 52.1	280	30	15 28.0	256	12	3 28.8	214
	19	22 20.4	279	Nov. I	9 57.6	255	13	21 59.0	211
	21	16 48.7	278	3	4 27.3	254	15	16 29.4	209
	23	11 17.2	278	4	22 57.0	253	17	10 59.9	208
	25	5 45.8	277	6	17 26.8	251	19	5 30.3	2 06
	27	0 14.3	276	8	11 56.6	250	21	0 0.6	203
	28	18 42.9	275	10	6 26.4	248	22	18 31.1	200
	30	13 11.6	274	12	0 56.4	246	24	13 1.5	198
Okt.	2	7 40.4	273	13	19 26.3	244	26	7 32.0	196
	4	2 9.1	272	15	13 56.2	242	28	2 2.5	194
	5	20 38.0	271	17	8 26.1	241	29	20 32.9	191
	7	15 7.0	270	19	2 56.2	239	31	15 3.3	188
				TRA	BANT	11.			
T		h m	0		h m		3.6	21 8.9	0
Jan.	1	16 33.1	-0.0385	März 13		0.0324	Mai 23	_ ′	0.0287
	5	5 57.8	383	17	9 26.3	321	27	10 18.7	287
	8	19 22.2	380		22 45.5	318	T . 30	23 28.1	287
	12	8 46.6	377		12 4.2	315	Juni 3	12 37.2	287
	15	22 10.7	374	28	1 22.6	312	7	1 45.8	286
	19	11 34.8	371		14 40.4	309	IO	14 54.2	286
	23	0 58.6	367	April 4	3 57.9	307	11	4 2.0	286
	26	14 22.3	364	7	17 14.8	305	17	17 9.9	286
Co.b.	30	3 45.8	361	11	6 31.4	303	21	6 17.2	286
£ebr.	7	17 9 1	358	14	19 47.3	30r	24	19 24.6	286
	6	6 32.1	354	18	9 2.7	300	7.1: 28	8 31.6	286
	9	19 54.8	351	21	22 17.7	298	Juli 1	21 39.0	287
	13	9 17.4	348	25	11 32.1	296	5	10 46.1	287
	16	22 39.7	344	Mai 29	0 45.9	294	8	23 53.6	288
	20	12 1.6	341	Mai 2	13 59.4	292	12	13 0.8	288

291

290

289

288

288

6 3 12.4

9 16 24.7

13 5 36.5

16 18 47.8

20 7 58.6

8.7

23 4 24.6

26 17 32.6

30 6 41.8

16 2 19 15 16.2 289

289

289

288

288

338

336

333

330

327

24

3 4 6 17 26.4

10

März

1 23.3

5.8

6 46.8

27 14 44.8

Geoz. Obe	ere	Ko	mj.	ь	Geoz.	Obei	re K	onj.	b	Geoz.	()be	re K	onj.	<i>b</i>
Mittler	e 7	Zeit	t	а	Mitt	tlere	Ze	it	a	Mit	tlerc	Ze	it	a
				T	RABA	N	ו יו	I. Œ	ortsetzung.)					
Aug. 2	7.	h	, mg	0.0288	Sept.	1	h	m		Nov.	T PT	h TO	ni Q	0.0241
Aug. 2	1	_	50.8	288	Sept.	-		17.7	-0.0277	TAOA.				-0.0241
		9	1.0	288	Ola			35.5	275		21	0	5.6	237
9			10.9	288	Okt.	2		55.0	273		24		29.6	233
13			22.0			-		13.9	271	Don	28		55.0	230
17		-	33.0	287 286		9	-	34.4	2 69	Dez.	I		19.4	226
20		_	15.3					54.4	2 67		5	-	44.9	222
24			57.4	286				16.0	266		8	19	9.7	218
27			I.I	286		19		36.8	263		12	8	35.6	214
31			24.4	285		23		59.1	261		15	22	0.7	210
Sept. 3			39.2	284		27		20.7	259		19		26.8	205
7			53.8	283	NT			43.8	256		23		52.1	200
10		I	9.9	282	Nov.	3	5	6.2	254		2 6	14	18.3	195
14	I	0 2	25.5	281		6	18	29 .9	251		30	3	43.9	191
17	2	3	42.7	280		10		53.0	248					
21	I	2	59.4	278		13	21	17.3	244					
					T	RA	ВА	NT	III.					
Jan. 4		ъ 7	™ 35·5	-0.0383	Mai	6	16h	44.0	0.0291	Sept	. 5	3	5.5	0.0284
11		22	3.7	377				22.8	288	.,,,,,,,	12			281
10			31.I	371		_		57.3	287		19		42.7	279
26		- '	57.2	365		28	-	27.I	287		26	14	37.7	276
Febr. 2	- 1		22.2	358	Juni	4	_	53.6	287	Okt.		18	37.3	272
(45.9	351	"	II		16.2	28 6	OK.	10		40.8	268
16		20	7.8			18		35.6	286		18		48.8	26
2.4			27.7	3 ' '				52.7	286 286			6		2 6
März 3	. 0		44.9		Juli	2		8.8	287	Nov	25		3//	
I		_	59.1	000					287 288	THOY.	8		14.9	250
			10.1			9	_					_	32.0	250
1'			18.1			17		42.5	289 288		15		51.5	24:
2.0					1	24		1.4	0.0	1	23		13.1	23
April 3			23.0			31		22.2			30		37.2	22
			23.8		_				288	Dez.	,	-		220
1		-	20.9	_				14.0	,				30.6	21
2:		-	13.3	-	1			46.1	286	1	21	,	59.9	20
20	9	13	0.7	2 94	. 1	20	23	23.5	286	!	28	22	29.1	19
					T	RA			IV.					
Jan. 10			27.4		Mai	24		40.5	-0.0255	Sept	. 17	19	16.3	-0.024
2		1	2.3		Juni			39.9	253	Okt	• 4	13	6.9	23
Febr. 1:						26	15	1.4	252		21	7	48.7	22
März		17	12.9		Juli	13	5		251	Nov	- 7	3	139	
		12	31.9			29		29.6					13.1	20
April .	4	7	9.4		Aug	. 15		29.8					37.7	18
2	- 1		56.4		Sept			23.6			27		26.5	17
Mai	7		47.7							1	,		,	,

TRABANT I.

				omiti i.			
Ein	tritte	Ein	tritte	Eir	ntritte	Au	st rit t e
Jan. 15	3 55 52	März 23	9 57 4	Mai 29	15 58 25	Aug. 3	5 49 11
16	22 24 21	25	4 26 I		10 26 52	5	0 17 55
18	16 52 55	26	22 54 3		4 55 25	6	18 46 35
20	II 2I 22	28		2 3	23 23 51	8	13 15 17
22	5 49 57	30	11 51 3		17 52 23	10	7 43 58
24	0 18 25	April I	6 19 5		12 20 51	12	2 12 43
25	18 46 58	3	0 48 2	1 9	6 49 25	13	20 41 24
27	13 15 25	4	19 16 4	1 11	1 17 52	15	15 10 7
29	7 43 58	6	13 45 1	3 12	19 46 25	17	9 38 48
31	2 12 26	8	8 13 3	14	14 14 54	19	4 7 34
Febr. 1	20 40 59	10	2 42	16	8 43 29	20	22 36 17
3	15 9 24	11	21 10 2	18	3 11 58	22	17 5 0
5	9 37 57	13	15 38 5	19	21 40 32	24	11 33 43
7	4 6 24	15	10 7 10	21	16 9 3	26	6 2 29
8	22 34 56	17	4 35 4	23	10 37 39	28	0 31 13
10	17 3 21	18	23 4	1	5 6 9	29	18 59 57
12	11 31 53	20	17 32 36		23 34 44	31	13 28 40
14	6 0 19	22	12 0 5	28	18 3 17	Sept. 2	7 57 27
16	0 28 50	24	6 29 26		12 31 54	4	2 26 11
17	18 57 14	26	0 57 50	Juli 2	7 0 26	5	20 54 56
19	13 25 46	27	19 26 19			7	15 23 40
2.1	7 54 11	29	13 54 41	I Ans	tritte	9	9 52 27
23	2 22 42	Mai 1	8 23 10	'		11	4 21 12
24	20 51 5	3	2 51 33		16 39 33	12	22 49 57
26	15 19 36	4	21 20 3		11 8 7	14	17 18 42
28	9 48 1	6	15 48 26		5 36 45	16	11 47 29
März 2	4 16 32	8	10 16 5		0 5 20	18	6 16 14
3	22 44 54	10	4 45 19		18 34 0	20	0 45 0
5	17 13 25	II	23 13 50		13 2 36	21	19 13 44
7	11 41 49	13	17 42 14		7 31 15	23	13 42 32
9	6 10 19	15	12 10 42		I 59 52	25	8 11 18
11	0 38 41	17	6 39 7		20 28 33	27	2 40 3
12	19 7 11	19	1 7 38	1	14 57 10	28	21 8 48
14	13 35 35	20	19 36 2	1	9 25 51	() -+ 30	15 37 36
16	8 4 5	22	14 4 32	,	3 54 29	Okt. 2	10 6 22
18	2 32 26	24	8 32 58	1	22 23 12	4	4 35 7
19	21 0 56	26	3 1 30	1 .	16 51 50	5	23 3 52
21	15 29 19	27	21 29 55	Aug. 1	11 20 31	7	17 32 39

Teng.A

TRABANT I. (Fortsetzung.)

Aust		Austritte					Austritte										
Okt. 9	12 ^h 1 ^m 26 ^s		Okt.	28	23	17	"46"	Nov.	17	10	33"	56°	Dez.	6	21 ^h		49
11	6 30				17				19			40		8	16	18	31
13	c 58	56	Nov.	1	12	15	16		20	23	31	25		10	10	47	12
14	19 27	42		3	6	44	1		22	18	0	7		12	5	15	56
16	13 56	29		5	I	12	46		24	12	28	50		13	23	44	36
18	8 25	14		6	19	41	32		2 6	6	57	33		15	18	13	18
20	2 53			8	14	JO	15		28	I	26	18		17	12	41	58
21	21 22	45	1	10	8	38	59		29	19	54	59		19	7	IO	41
23	15 51	31		12	3	7	44	Dez.	1	14	23	42		2.1	1	39	20
25	10 20	16		13	21	36	29		3	8	52	24		22	20	8	1
27	4 49	Ι		15		_	12		5		21	8		24	14	36	40

TRABANT II.

												a halffanderen						
	Ein	tritte	e]	Eint	ritte			Aus	tritt	P			Au	stritt	te	
Jan.	15	19	52	34	April	14	15	50	31	Juli 5	12	9"	18	Okt.	2	8 ^h	58 ^m	15
	19	9	9	38		18		7	11	9	I	27	35		5		16	
	22	22	2 6	38		21	18	23	51	12	14	45	27		9	11	36	41
	26	11	43	36		25	7	40	34	16	4	3	54		13	0	55	20
	30	I	0	31		28	20	57	18	19	17	21	53		16	14	15	7
Febr.	. 2	14	17	25	Mai	2	10	14	4	23	6	40	31		20	3	33	46
	6	3	34	15		5	23	30	53	26	19	58	35		23	16	53	32
	9	16	51	5		9	12	47	43	30	9	17	23		27	6	12	10
	13	6	7	50		13	2	4	38	Aug. 2	22	35	33		30	19	31	54
	16	19		36		16	15		32	6	II	54	31	Nov.	3	8	50	31
	20		41	18		20	4	38	33	10	1	12	46		6	22	10	13
	23	21	58	0		23	17	55	33	13	14	31	53		IO	4	28	• /
	27	11	14	39		27	7	12	41	17	3	50	13		14	0	48	25
März	3	0	31	18		30	20	29	46	20	17	9	28		17	14	6	58
	6	13	47	56	Juni	3	9	47	3	24	6	27	53		21	3	26	3 I
	10	3	4	33		6	23	4	13	27	19	47	16		24	16	45	I
	13	16	21	8		10		21	39	31	9	5	44		28	6	4	2 9
	17	5	~ /	44		14		38	56	Sept. 3	22	2 5	13	Dez.	1	19	22	55
	20		54			17	14	56	32	7	II	43	45		5	8	42	16
	24	8	10	54		21	4	13	54	11	1	3	20		8	22	0	39
	27	21	27	30		24		31	40	14		21	54		12		19	54
	31		44	4		28		49		18	3	41	33		16	0	38	13
April	4		0	٠,	Juli	1	20	7	6	21	1 '-		10		19	13	57	21
	7	,	17	16						25			52		23	3	15	36
	11	2,	33	54						28	19	38	30					

Mitto der V	erfinsterung	Halhe Dauer	Mitte der V	erfinsterung	Halbe Dauer							
TRABANT III.												
Jan. 19	0 2 0 2 9	h m s I 19 40	Juli 9	23 54 52	1 33 118 s							
26	4 19 6	1 20 18	17	3 54 41	I 33 47							
Febr. 2	8 17 45	1 20 55	24	7 55 4	1 34 16							
9	12 16 53	1 21 33	31	11 54 56	I 34 44							
16	16 15 47	I 22 IO	Aug. 7	15 54 47	1 35 12							
23	20 15 8	1 22 47	14	19 54 38	I 35 39							
März 3	0 13 50	1 23 23	21	23 54 42	1 36 5							
IO	4 12 24	I 24 O	29	3 55 25	1 36 31							
17	8 10 47	1 24 36	Sept. 5	7 55 54	I 36 57							
24	12 9 14	1 25 11	12	11 56 50	1 37 23							
31	16 8 13	1 25 46	19	15 57 12	1 37 48							
April 7	20 6 59	1 26 21	26	19 57 28	1 38 12							
15	0 6 14	1 26 55	Okt. 3	23 57 41	I 38 36							
22	4 4 53	1 27 29	II	3 58 3	1 38 59							
29	8 3 26	1 28 3	18	7 59 0	т 39 22							
Mai 6	12 1 53	1 28 36	25	11 59 37	I 39 44							
13	16 0 30	r 29 9	Nov. 1	16 0 36	1 40 6							
20	19 59 44	I 29 42	8	20 0 57	1 40 28							
27	23 58 48	1 30 14	16	0 1 9	1 40 49							
Juni 4	3 58 24	1 30 46	23	4 1 17	1 41 9							
II	7 57 28	1 31 17	30	8 1 31	1 41 29							
18	11 56 32	1 31 48	Dez. 7	12 2 19	1 41 48							
25	15 55 35	1 32 18	14	16 2 42	1 42 7							
Juli 2	19 54 53	1 32 48	2.1	20 3 24	I 42 26							
		TRABA	NT IV.									
März 18	o 49 54	0 27 15	Aug. 15	19 14 57	1 35 9							
April 3	18 50 31	0 41 10	Sept. 1	13 21 5	1 39 34							
20	12 51 15	0 51 23	18	7 27 47	1 43 40							
Mai 7	6 52 50	0 59 51	Okt. 5	I 35 30	1 47 31							
24	0 54 24	1 7 14	21	19 42 42	1 51 7							
Juni 9	18 56 38	1 13 51	Nov. 7	13 49 57	1 54 30							
2 6	13 0 12	1 19 51	24	7 57 53	1 57 38							
Juli 13	7 4 1	1 25 21	Dez. 11	7 57 55 2 4 59	2 0 33							
30	i 8 47	I 30 26	-> 01/1 11	- 7 39	55							

O _p	α	β	p_a	a	b	U'	B'	P'
Jan. o	20.05	18.32	+0.03	45.14	18.45	252° 1.2	-24 57.5	+8° 21.7
4	19.93	18.22	0.03	44.89	18.34	252 10.9	24 59.0	8 17.4
8	19.81	18.11	0.03	44.63	18.22	252 20.5	25 0.5	8 13.0
12	19.69	18.00	0.04	44.35	18.10	252 30.1	25 2.0	8 8.7
16	19.56	17.88	0.04	44.06	17.98	252 39.7	25 3.5	8 4.3
20	19.43	17.76	+0.04	43.77	-17.86	252 49.3	25 5.0	+7 59.9
24	19.29	17.64	0.05	43.46	17.74	252 59.0	25 6.5	7 55.5
28	19.16	17.52	0.05	43.15	17.62	253 8.6	25 8.0	7 51.1
Febr. 1	19.02	17.39	0.06	42.84	17.51	253 18.3	25 9.4	7 46.7
5	18.88	17.26	0.06	42.53	17.40	253 27.9	25 10.9	7 42.3
9	18.74	17.13	+0.06	42.21	17.29	253 37.6	-25 12.3	+7 37.9
13	18.60	17.00	0.06	41.90	17.19	253 47-3	25 13.7	7 33.5
17	18.46	16.88	0.06	41.59	17.09	253 57.0	25 15.1	7 29.1
21	18.33	16.76	0.05	41.29	17.00	254 6.7	25 16.5	7 24.7
25	18.20	16.64	0.05	40.99	16.91	254 16.4	25 17.9	7 20.2
März 1	18.07	16.52	+0.05	40.70	16.83	254 26.1	-25 19.3	+7 15.8
5	17.94	16.41	0.05	40.42	16.75	254 35.8	25 20.7	7 11.3
9	17.82	16.30	0.05	40.14	16.68	254 45.5	25 22.1	7 6.9
13	17.71	16.20	0.04	39.88	16.61	254 55.2	25 23.4	7 2.4
17	17.59	16.10	0.04	39.63	16.55	255 4.9	25 24.8	6 58.0
2,1	17.49	16.00	+0.04	39.38	-16.49	255 14.6	25 26.1	+6 53.5
25	17.38	15.91	+0.03	39.16	-16.44	255 24.3	-25 27.4	+6 49.0
Okt. 7	19.46	17.85	-0.05	43.82	-19.48	263 25.8	—26 18.7	+3 5.4
11	19.59	17.98	0.05	44.13	19.61	263 35.7	26 19.5	3 0.8
15	19.72	18.10	0.04	44.42	19.74	263 45.6	26 20.2	2 56.1
19	19.85	18.21	0.04	44.71	19.86	263 55.5	26 21.0	2 51.5
23	19.97	18.32	0.03	44.98	19.97	2 64 5.5	26 21.7	2 46.8
27	20.08	18.42	-0.03	45.24	-20.08	264 15.4	26 22.4	-F2 42.2
31	20.19	18.52	0.03	45.48	20.18	264 25.3	26 23.1	2 37.5
Nov. 4	20.29	18.61	0.02	45.71	20.27	264 35.2	26 23.8	2 32.8
8	20.38	18.70	0.02	45.91	20.36	264 45.2	26 24.5	2 28.1
12	20.46	18.78	0.01	46.09	20.43	264 55.1	26 25.2	2 23.5
16	20.53	18.84	-0.01	46.25	-20.50	2 65 5.1	- 26 25.9	1-2 18.8
20	20.59	18.89	0.01	46.38	20.55	265 15.0	26 26.6	2 14.1
24	20.64	18.93	0.00	46.49	20.60	265 25.0	26 27.2	2 9.4
28	20.67	18.96	0.00	46.57	20.63	265 34.9	26 27.8	2 4.8
Dez. 2	20.69	18.98	0.00	46,61	20.65	265 44.9	26 28.4	2 0.1
6	20.70	18.99	0.00	46.63	-20.66	265 54.8	-26 29.0	-+·I 55.4
10	20.70	18.99	0.00	46.62	20.66		26 29.6	1 50.7
14	20.68	18.98	0.00	46.59	20.64		26 30.2	1 46.1
18	20.65	18.95	0.00	46.53	20.61		26 30.8	1 41.4
22	20.61	18.90	10.01	46.43	20.56	266 34.6	26 31.4	I 36.7
26	20.56	18.85	+0.01	46.30	-20.50	266 44.6	-26 31.9	+1 32.0
30	20.49	18.79	0.01	46.15	20.43	266 54.6	26 32.4	1 27.3
34	20.41	18.72	-1-0.02	45.98	-20.35	2 67 4.6	-2632.9	+I 22.6

\circ_{μ}	U	В	P	o _p	U	В	P
Jan. o	290 4.9	-24° 6.9	-2° 28.2	Okt. 7	312 18.0	-26° 22.9	-4° 57.
2	289 58.5	24 6.3	2 27.5	9	312 16.1	26 22.7	4 57.0
4	289 52.6	24 5.8	2 26.8	11	312 13.8	26 22.5	4 56.
6	289 47.1	24 5.4	2 26.1	13	312 11.0	26 22.3	4 56.
8	289 41.9	24 5.0	2 25.5	15	312 7.7	26 22.1	4 56.
10	289 37.2			-		-26 21. 9	_
12	289 37.2 289 33.0	-24 4.7	-2 24.9	17			-4 55.
		24 4.5	2 24.4	19	311 59.6	26 21.7 26 21.5	4 55.
14 16	289 29.2	24 4.4	2 24.0	21	311 54.9		4 54
18	289 25.9	24 4.4	2 23.6	23	311 49.7	26 21.4	4 54
	289 23.0	24 4.5	2 23.3	25	311 44.1	26 21.2	4 53.
20	289 20.6	-24 4.6	-2 23.0	27	311 38.0	-26 21.0	− 4 53⋅
22	289 18.7	24 4.9	2 22.8	29	311 31.5	26 20.8	4 52.
24	289 17.3	24 5.2	2 22.6	31	311 24.7	26 20.7	4 51.
26	289 16.4	24 5.6	2 22.5	Nov. 2	311 17.4	26 20.5	4 51.
28	289 16.0	24 6.1	2 22.4	4	311 9.8	26 20.3	4 50.
30	289 16.1	-24 6.7	-2 22.4	6	311 1.8	-26 20. I	4 49
Febr. 1	289 16.6	24 7.4	2 22.5	8	310 53.4	26 20.0	4 48.
3	289 17.6	24 8.2	2 22.6	10	310 44.7	26 19.8	4 47
5	289 19.2	24 9.0	2 22.8	12	310 35.7	26 19.7	4 46.
7	289 21.2	24 10.0	2 23.1	14	310 26.4	26 19.5	4 46.
9	289 23.7	24 II.O	—2 23.4	16	310 16.8	-26 19.4	-4 45
11	289 26.7	24 12.1	2 23.8	18	310 7.0	26 19.2	4 44.
13	289 30.2	24 13.3	2 24.2	20	309 56.9	26 19.1	4 43
15	289 34.1	24 14.6	2 24.7	22	309 46.6	26 18.9	4 42.
17	289 38.5	24 15.9	2 25.2	2.4	309 36.2	26 18.8	4 40.
19	289 43.4	-24 17.3	2 25.8	26	309 25.6	—26 18.6	-4 39
21	289 48.7	24 18.8	2 26.4	28	309 14.8	26 18.5	4 38.
23	289 54.5	24 20.4	2 27.1	30	309 3.9	26 18.3	4 37
25	290 0.7	24 22.0	2 27.9	Dez. 2	308 53.0	26 18.2	4 36.
27	290 7.3	24 23.7	2 28.7	4	308 42.0	26 18.0	4 35
März 1	290 14.4	-24 25.4	-2 29.6	6	308 31.0	26 17.9	-4 34
3	290 21.9	24 27.2	2 30.5	8	308 19.9	26 17.7	4 33
5	290 29.9	24 29.0	2 31.5	10	308 8.9	26 17.6	4 31.
7	290 38.3	24 30.9	2 32.5	12	307 57.9	26 17.4	4 30
9	290 47.1	24 32.8	2 33.6	14	307 47.0	26 17.3	4 29
11	290 56.2	-24 34·7	-234.7	16	307 36.2	-26 I7.2	-4 28
13	291 5.8	24 36.7	2 35.9	18	307 25.4	26 17.1	4 27
15	291 15.7	24 38.7	2 37.1	20	307 14.8	26 17.0	4 26
17	291 26.0			22	307 4.4	26 16.9	
19	291 36.6			24	306 54.2	26 16.8	4 23
21	291 47.6	-24 44.9		26	306 44.1	-26 16.7	- 4 23
23	291 58.9			28	306 34.2	2 6 16.6	4 22
25	292 10.6	24 47.0 24 49.2				26 16.5	
45	494 10.0	24 49.2	2 43.7	30	306 24.7		
	1			32	306 15.5	-26 16.4	-4 20

MIMAS.

O ^h	L	M	$\log \frac{a(\rho)}{\rho}$	$\frac{a(\mathbf{p})}{\mathbf{p}}\sin B$	O ^h	L	M	$\log \frac{a(p)}{p}$	$\frac{a(\mathbf{p})}{\mathbf{p}}\sin B$
Jan. o	26° 49.8	9.26	1.48799	-12.57	Okt. 7	66 30.3	120.08	1.47516	-13.27
2			1.48681	12.53	9	110 39.2			13.32
4	114 49.8			12.49	11	154 39.1			13.37
6	158 49.8			12.45	13	198 39.0			13.41
8	202 49.7			-12.41	15	242 38.8			13.45
10	246 49.7			12.37	17	286 38.7			13.49
12	290 49.7			12.33	19	330 38.6			13.53
14	334 49.6			12.29	2.1	14 38.5		1.48514	13.57
16			1.47750	12.25	23			1.48644	-13.61
8r	62 49.6			12.21	25	102 38.3			13.65
20	106 49.5		1.47456	12.17	27	146 38.2			13.69
22	150 49.5			12.13	29	190 38.1			13.72
24	194 49.4	-		12.09	31	234 37.9			-13.75
26	238 49.4		1.46999	12.05	Nov. 2	278 37.8			13.78
28	282 49.3		1.46843	12.01	4	322 37.7			13.81
30	326 49.3		1.46686	11.97	6	6 37.6			13.84
Febr. 1	10 49.2		1.46527	-11.93	8	50 37.5		1.49532	-13.87
3	54 49.2		1.46368	11.89	10			1.49620	13.90
5	98 49.1		1.46208	11.85	12	138 37.2			13.93
7	142 49.1		1.46047	11.81	14	182 37.1			13.95
9	186 49.0			-11.78	16	226 37.0			-13.97
11	230 49.0			11.74	18	270 36.8			13.99
13	274 48.9	213.25		11.71	20	314 36.7	333.04	1.49977	14.01
15	318 48.9			11.68	22	358 36.6			14.03
17		297.24		=11.65	24	42 36.5		1.50076	14.04
19	46 48.8			11.61	26	86 36.4			14.05
21			1.44925	11.58	28	130 36.2			14.06
23	134 48.7	63.24	1.44767	11.55	30	174 36.1			14.07
25	178 48.6	105.24	1.44610	-11.52	Dez. 2	218 35.9			-14.07
27	222 48.6	147.24	1.44455	11.49	4	262 35.8			14.07
März 1	266 48.5			11.46	6	306 35.7			14.07
3	310 48.4	231.24	1.44149	11.43	8	350 35.6			14.07
5	354 48.4	273.24	1.43999	-11.41	01			1.50206	-14.07
7			1.43850	11.38	12	78 35.3	75.01	1.50191	14.07
9	82 48.2	357.24	1.43704	11.36	14			1.50170	14.06
II	126 48.2	39.24	1.43560	11.34	16	166 35.0	159.01	1.50142	14.05
13	170 48.1	81.24	1.43418	11.32	18	210 34.8	201.00	1.50107	-14.04
15	214 48.0	123.24	1.43278	11.30	20	254 34.7	243.00	1.50066	14.03
17	258 48.0	165.24	1.43141	11.28	22	298 34.6	-		14.01
19	302 47.9			11.26	24				13.99
21	346 47.8	249.23	1.42875	11.24	26			1.49902	-13.97
23	30 47.8	291.23	1.42747	11.22	28	70 34.2	51.00	1.49835	13.95
25	74 47.7	333.23	1.42621	-11.20	30	114 34.0	93.00	1.49762	13.93
					32	158 33.9	135.00	1.49683	-13.90

M

270

268

266

 $\log \frac{r}{a}$

0.00016

0.00044

0.00073

v - M

+2° 10.6-

2 10.4

2 10.1

MIMAS.

M

90

92

94

M

360°

358

356

 $\log \frac{r}{a}$

9.99167

9.99167

9.99169

M

0

2

4

68

70

72

74

76

78

80

82

84

86

88

90

2 2.2

2

2 6.4

2 7.5

2 8.4

2

12

3.7

5.1

9.2

9.8

2 10.2

2 10.5

2 10.6

+2 10.6--

12

v - M

+∘°

0 9.3

0.0-

4.7

4	~ 9.3	9.99109	350	94	2 10.1	0.000/3	400
6	0 14.0	9.99172	354	96	2 9.6	10100.0	264
8	0 18.6	9.99175	352	98	2 8.9	0.00130	262
10	-+0 23.2	9.99180	350	100	+2 8.1—	0.00158	260
12	0 27.8	9.99186	348	102	2 7.1	0.00186	258
14	0 32.3	9.99193	346	104	2 6.0	0.00214	256
16	0 36.8	9.99201	344	106	2 4.7	0.00241	254
18	0 41.3	9.99210	342	108	2 3.3	0.00268	252
20	+ 0 45.7-	9.99220	340	110	+2 1.7-	0.00295	250
22	0 50.0	9.99230	338	112	2 0.0	0.00321	248
24	o 54.3	9.99242	336	114	1 58.2	0.00347	246
2 6	0 58.5	9.99255	334	116	1 56.2	0.00373	244
28	1 2.6	9.99269	332	118	1 54.0	0.00398	242
30	+1 6.7—	9.99284	330	120	+1 51.8-	0.00422	240
32	1 10.6	9.99299	328	122	1 49.4	0.00446	238
34	1 14.5	9.99316	326	124	1 46.9	0.00469	236
3 6	1 18.3	9.99333	324	126	I 44.2	0.00492	234
38	I 22.0	9.99351	322	128	1 41.4	0.00514	232
40	+1 25.5-	9.99370	320	130	+1 38.6—	0.00536	230
42	1 29.0	9.99390	318	132	т 35.6	0.00557	228
44	1 32.3	9.99410	316	134	I 32.4	0.00577	226
46	1 35.5	9.99431	314	136	1 29.2	0.00597	224
48	1 38.6	9.99453	312	138	I 25.9	0.00616	222
50	+1 41.6-	9.99476	310	140	+I 22.5—	0.00634	220
52	1 44.5	9.99499	308	142	1 18.9	0.00651	218
54	1 47.2	9.99523	306	144	1 15.3	0.00668	216
56	1 49.7	9.99547	304	146	1 11.6	0.00683	214
58	1 52.2	9.99572	302	148	r 7.9	0.00698	212
60	+1 54.5	9.99598	300	150	+1 4.0	0.00713	210
62	1 56.6	9.99623	298	152	1 O.1	0.00726	208
64	1 58.6	9.99650	296	154	0 56.1	0.00738	206
66	2 0.5	9.99676	294	156	0 52.0	0.00750	204
(0				0			The second second

292

290

288

286

284

282

280

278

276

274

272

270

9.99704

9.99731

9.99759

9.99787

9.99815

9.99843

9.99872

9.99900

9.99929

9.99958

9.99987

0.00016

158

160

162

164

166

168

170

172

174

176

178

180

0 47.9

1-0 43.7-

0 39.5

0 35.2

0 30.9

0 26.5

0 17.8

13.3

8.9

0.0-

---- 22.2

0

0 4.5

+0

0.00760

0.00770

0.00779

0.00787

0.00794

0.00800

0.00805

0.00810

0.00813

0.00815

0.00817

0.00817

202

200

198

196

194

192

190

188

186

184

182

180

ENCELADUS.

2 269 30.9 34.6 1.59502 16.07 9 34 19.2 64.9 1.58487 17. 4 74 58.7 1994 1.59381 16.02 11 199 47.0 229.7 1.58635 17. 8 45 54.2 169.0 1.59125 15.92 15 17.0 42.6 199.2 1.58624 17. 10 211 22.0 333.8 1.58891 -15.86 17 336 10.4 4.0 1.59064 -17. 11 182 17.5 303.4 1.588714 15.76 21 307 6.0 333.6 1.59301 17. 18 153 13.1 272.9 1.58425 15.66 20 318 48.7 7.7 1.58277 -15.61 22 10.8 48.7 7.7 1.58277 15.56 22 124 8.6 24.25 1.58127 15.56 29 248 57.2 272.8 1.5935 17. 22 124 8.6 24.25 1.58127 15.56 29 248 57.2 272.8 1.59582 17. 23 11 23.8 13.1 272.1 1.57820 15.46 28 260 31.8 16.9 1.57664 15.41 30 65 5.96 181.7 1.57507 -15.36 16 19.4 4.1 182.5 1.6610.5 17. 30 65 59.6 181.7 1.57507 -15.36 16 19.4 4.2 12.9 1.66055 17. 31 36 55.1 151.2 1.57189 15.26 10 161 44.1 181.5 1.66160 17. 30 65 59.6 181.7 1.57507 -15.36 19.9 48.4 211.9 1.66052 17. 31 144 13.8 25.2 1.56588 15.16 14 132 39.7 151.1 1.66060 17. 31 144 13.8 25.2 1.56588 15.16 14 132 39.7 151.1 1.66060 17. 31 144 13.8 25.2 1.56588 15.16 14 132 39.7 151.1 1.66060 17. 31 144 13.8 25.2 1.56588 15.06 15.07 18 103 35.3 120.6 1.60524 17. 32 12 22 28.2 328.7 15.5588 15.03 20 269 3.1 285.4 1.60937 18. 15.9094 11.60060 17.0 18. 15.0 19. 19. 19. 19. 19. 19. 19. 19. 19. 19.	O ^h	L	M	$\log \frac{a(\rho)}{\rho}$	$\frac{\sigma(\rho)}{\rho}\sin B$	O ^h	L	M	$\log \frac{a(\rho)}{\rho}$	$\frac{a(\rho)}{\rho}\sin B$
2 269 30.9 34.6 1.59502 16.07 9 34 10.2 64.9 1.58487 17. 4 74 58.7 1994 1.59381 116.02 11 199 47.0 22.7 1.58635 17. 8 45 54.2 1690 1.59125 15.92 15 170 42.6 199.2 1.58924 17. 10 211 22.0 333.8 1.58991 -15.86 17 336 10.4 4.0 1.59064 -17. 11 182 17.5 303.4 1.58714 15.76 21 307 6.0 333.6 1.59335 17. 18 153 13.1 27.9 1.58425 15.66 25 278 1.6 303.2 1.59592 17. 22 124 8.6 242.5 1.58277 -15.61 29 248 57.2 272.8 1.59514 17. 22 124 8.6 242.5 1.58727 15.51 29 248 57.2 272.8 1.59514 17. 28 260 31.8 16.9 1.57664 15.41 4 25 25 26 47.1 1.60050 17. 30 65 59.6 181.7 1.57534 15.31 8 356 16.3 16.7 16.0353 17. 3 36 55.1 151.2 1.57189 15.26 10 161 44.1 18.15 1.60050 17. 3 36 55.1 151.2 1.57189 15.26 10 161 44.1 18.15 1.60441 17. 3 36 15.1 13.2 1.575029 15.21 12 32.7 11.9 346.3 1.6055 17. 3 36 35.1 15.2 1.57589 15.26 10 161 44.1 18.15 1.60461 17. 3 36 15.1 15.2 1.57566 15.07 18 103.3 32.5 1.6054 17. 3 36 36 37.3 1.55668 15.16 14 132 39.7 151.1 1.60502 17. 3 36 36 37.3 1.55586 15.07 18 103.3 3.158.4 1.60441 17. 3 36 36 37.3 1.55586 15.07 18 103.3 3.158.4 1.60441 17. 3 38 40.1 90.4 1.55546 15.07 18 103.3 3.158.4 1.60441 17. 3 39 41.6 60.0 1.55224 14.98 22 74 30.9 90.2 1.60851 18 12.2 1.55746 14.94 24.2 23.9 58.8 25.0 1.60937 18 12.2 27. 3 39 3.7 29.3 1.55588 14.82 28.2 20.5 4.14 13.3 3.16007 18 1.55746 14.64 1.14 1.	Jan. o	104 3.2	229.8	1.59620	— 16 ["] .12	Okt. 7	228 51.4	260.1	1.58337	-17.03
4	2,									17.09
6 240 26.4 4.2 1.59255 15.97 13 5 14.8 34.5 1.58781 17. 8 45 54.2 1690. 1.59125 15.92 15 170 24.6 1992. 1.58024 17. 10 211 22.0 333.8 1.58991 -15.92 17 33.6 10.4 4.0 1.59064 -17. 11 182 17.5 303.4 1.58714 15.76 21 307 6.0 333.6 1.59335 17. 14 182 17.5 303.4 1.58714 15.76 21 307 6.0 333.6 1.59335 17. 18 153 13.1 272.9 1.58425 15.66 22 27.8 1.6 303.2 1.59592 17. 20 318 40.8 77.7 1.58277 -15.61 27 83 29.4 108.0 1.59592 17. 21 24 289 36.3 47.3 1.57974 15.51 28.2 26.4 4.8 16.9 1.57974 15.51 28.2 26.9 31.8 16.9 1.57964 15.41 4.2 25 2.06 47.1 1.60055 17. 28 260 31.8 16.9 1.57582 15.46 15.47 4.2 25 2.06 47.1 1.60160 17. 30 65 59.6 181.7 1.5738 15.31 8 356 16.3 16.7 1.60353 17. 3 36 55.1 151.2 1.57189 15.26 10 161 44.1 181.5 1.60441 17. 3 3 46.5 1.5028 1.55868 15.16 14 132 39.7 151.1 1.60562 17. 4 7 5.66 12.8 1.56967 -15.12 12 327 11.9 346.3 1.60524 17. 3 11 338 46.1 9.4 1.56546 15.07 18 0.3 35.2 12.06 1.60451 17. 3 11 338 46.1 9.4 1.56546 15.07 18 0.3 35.2 12.06 1.60651 17. 3 144 13.8 25.5. 1.55624 14.94 1.94 1.94 2.9 2.9 4.1 1.60160 17. 3 15 309 41.6 6.0 1.56224 14.98 2.2 74 30.9 90.2 1.60851 18.17 11.5064 14.94 1.94 1.94 1.94 1.94 1.94 1.94 1.	4				16.02					17.14
8	6				15.97	13			1.58781	17.20
10	8	45 54.2				15			1.58924	17.25
12	10	211 22.0	333.8		— 15.86	17	336 10.4	4.0	1.59064	-17.31
16	12	16 49.7	138.6	1.58854		19	141 38.2	168.8	1.59201	17.36
18	14	182 17.5	303.4	1.58714	15.76	21	307 6.0	333.6	1.59335	17.41
20	16	347 45.3	108.1		15.71	23	112 33.8	138.4	1.59465	17.46
22	18	153 13.1	272.9	1.58425	15.66	25			1.59592	17.51
24 289 36.3 47.3 1.57974 15.51 26 95 4.1 212.1 1.57820 15.46 15.41 4 25 20.6 47.1 1.6055 17 1.6055 17 1.6055 17 1.5066 18.7 1.5736 15.36 6 190 48.4 211.9 1.6052 17 1.6035 17 1.	20	318 40.8	77.7		15.61	27		108.0	1.59714	-17.55
26	22			1.58127	15.56	29	248 57.2	272.8	1.59832	17.60
28	-	2 89 36.3	47.3			1	54 25.0	77-5		17.64
30 65 59.6 181.7 1.57507 —15.36 6 190 48.4 211.9 1.60259 —17.6053 17 Febr. I 231 27.3 346.4 1.57348 15.31 8 356 16.3 16.7 1.60353 17 3 36 55.1 151.2 1.5789 15.26 10 161 44.1 181.5 1.60441 17 5 202 22.8 316.0 1.57029 15.21 12 327 11.9 346.3 1.60524 17 17 15 16 15.07 —15.12 16 298 7.5 315.8 1.60602 17 13 144 13.8 25.52 1.56546 15.07 18 103 35.3 15.06673 17 15 39 41.6 60.0 1.56546 15.07 18 103 35.8 25.0 1.60873 17 15 39.4 60.0					15.46	Nov. 2	219 52.8	242.3		17.68
Febr. I 231 27.3 346.4 1.57348 15.31 8 356 16.3 16.7 1.60353 17 3 36 55.1 151.2 1.57189 15.26 10 161 44.1 181.5 1.60441 17 5 202 22.8 316.0 1.57029 15.21 12 327 11.9 346.3 1.60524 17 7 7 50.6 120.8 1.56868 15.16 14 132 39.7 15.11 1.60602 17 11 338 46.1 90.4 1.56546 15.07 18 103 35.3 120.6 1.60673 17 15 309 41.6 60.0 1.556385 15.03 20 269 3.1 285.4 1.60978 17 15 309 41.6 60.0 1.55604 14.99 24 239 58.8 255.2 1.66887 18 17 115 9.4 1.55746 14.86 28 210 54.4 224.0 1.60937 18 23 251 32.7 359.1 </td <td>28</td> <td></td> <td>-</td> <td></td> <td></td> <td>4</td> <td></td> <td></td> <td></td> <td>17.72</td>	28		-			4				17.72
3 36 55.1 151.2 1.57189 15.26 10 161 44.1 181.5 1.60441 17 17 15 202 22.8 316.0 1.57029 15.21 12 327 11.9 346.3 1.60524 17 7 50.6 120.8 1.56868 15.16 14 132 39.7 151.1 1.60602 17 11 338 46.1 90.4 1.56546 15.07 18 103 35.3 120.6 1.60738 17 13 144 13.8 255.2 1.56385 15.03 20 269 3.1 285.4 1.60798 17 15 309 41.6 60.0 1.56224 14.98 22 74 30.9 90.2 1.60851 18 17 115 9.4 224.7 1.56064 14.94 24 239 58.8 255.0 1.60897 18 19 280 37.2 29.5 1.55594 14.86 28 210 54.4 224.6 1.60970 18 25 57 0.4 163.9 1.55548 14.82 25 57 0.4 163.9 1.55548 14.78 25 57 0.4 163.9 1.55122 14.71 6 152 45.7 163.7 1.61016 18 27 222 28.2 328.7 1.55276 14.74 4 347 17.9 358.9 1.61029 18 3193 23.7 298.3 1.54970 14.667 8 318 13.5 328.5 1.61034 18 9 329 47.0 72.6 1.54820 14.64 10 123 41.4 133.3 1.61027 18 9 329 47.0 72.6 1.54820 14.64 10 123 41.4 133.3 1.61027 18 135 14.8 237.4 1.54381 14.55 16 260 4.8 267.7 1.60996 18 13 300 42.5 42.2 1.54239 14.55 16 260 4.8 267.7 1.60996 18 13 300 42.5 42.2 1.54239 14.55 16 260 4.8 267.7 1.60996 18 17 135 14.8 237.4 1.54381 14.55 16 260 4.8 267.7 1.60996 18 17 135 14.8 237.4 1.54381 14.55 16 260 4.8 267.7 1.60996 18 17 135 14.8 237.4 1.54381 14.55 16 260 4.8 267.7 1.60996 18 17 135 14.8 237.4 1.54381 14.55 16 260 4.8 267.7 1.60987 18 13 130 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60928 18 17 7271 38.0 11.8 1.53962 14.49 20 231 0.5 237.2 1.60988 17 7271 38.0 11.8 1.53962 14.49 20 231 0.5 237.2 1.60887 17 7271 38.0 11.8 1.53962 14.49 24 20 56.1 206.8 1.60784 17 22 242 23.6 34.4 1.462. 1.53568 14.43 24 20 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53366 14.49 24 20 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53366 14.49 24 20 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53366 14.49 24 20 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53366 14.49 24 20 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53366 14.49 24 20 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53366 14.49 24 20 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53366 14.49 24 20 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53366 14.49 24 20 56.1 206.8 1.60887 17 22 242 34.8 11.60583								_		-17.76
5 202 22.8 316.0 1.57029 15.21 12 327 11.9 346.3 1.60524 17 7 7 50.6 120.8 1.56868 15.16 14 132 39.7 151.1 1.60602 17 9 173 18.3 285.6 1.56707 15.12 16 298 7.5 315.8 1.60673 17 11 338 46.1 90.4 1.56546 15.07 18 103 35.3 120.6 1.60738 17 15 309 41.6 60.0 1.56385 15.03 20 269 3.1 1.60798 17 15 309 41.6 60.0 1.56224 14.98 22 74 30.9 90.2 1.60897 18 19 280 37.2 29.5 1.555964 -14.90 26 45 26.6 59.8 1.60937 18 21 86 4.9 194.3 1.55746 14.86 28 210 54.4 224.6 1.60997 18 </td <td>Febr. 1</td> <td></td> <td></td> <td></td> <td></td> <td>8</td> <td></td> <td></td> <td></td> <td>17.80</td>	Febr. 1					8				17.80
7	3				_	10				17.84
9						12				17.87
11 338 46.1 90.4 1.56546 15.07 18 103 35.3 120.6 1.60738 17 13 144 13.8 255.2 1.56385 15.03 20 269 3.1 285.4 1.60798 17 15 309 41.6 60.0 1.56224 14.98 22 74 30.9 90.2 1.60851 18 17 115 9.4 224.7 1.56064 14.94 24 239 58.8 255.0 1.60897 18 19 280 37.2 29.5 1.55904 —14.90 26 45 26.6 59.8 1.60937 —18 21 86 4.9 194.3 1.55746 14.86 28 210 54.4 224.6 1.60970 18 22 25 32.7 359.1 1.55588 14.82 30 16 22.2 29.4 1.60997 18 25 57 0.4 163.9 1.55431 14.78 14.74 4 347 17.9 358.9 1.61029 18 März 1 27 55.9 133.5 1.55122 —14.71 6 152 45.7 163.7 1.61035 —18 19 32 3.7 298.3 1.54970 14.67 8 318 13.5 328.5 1.61034 18 5 358 51.5 103.0 1.54820 14.64 10 123 41.4 133.3 1.61027 18 7 164 19.3 267.8 1.54525 14.58 14 94 37.0 102.9 1.60991 18 11 135 14.8 237.4 1.54381 —14.55 16 260 4.8 267.7 1.60963 —18 13 300 42.5 42.2 1.54239 14.55 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 272 324 33.6 341.4 1.53696 —14.41 26 7 24.0 11.6 1.60723 —17 28 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 28 172 51.8 176.6 1.60839 17		, ,						_		17.90
13 144 13.8 255.2 1.56385 15.03 20 269 3.1 285.4 1.60798 17 15 309 41.6 60.0 1.56224 14.98 22 74 30.9 90.2 1.60851 18 17 115 9.4 224.7 1.56064 14.94 24 239 58.8 255.0 1.60897 18 19 280 37.2 29.5 1.55904 —14.90 26 45 26.6 59.8 1.60937 —18 21 86 4.9 194.3 1.55746 14.86 28 210 54.4 224.6 1.60970 18 25 57 0.4 163.9 1.555431 14.78 16.22.2 29.4 1.60997 18 27 222 28.2 328.7 1.55421 14.74 4 347 17.9 358.9 1.61029 18 März 1 27 55.9 133.5 1.54970 14.67 8 318 13.5 328.5 1.61029	9									-17.93
15 309 41.6 60.0 1.56224 14.98 22 74 30.9 90.2 1.60851 18 17 115 9.4 224.7 1.56064 14.94 22 33 58.8 255.0 1.60897 18 280 37.2 29.5 1.55904 —14.90 26 45 26.6 59.8 1.60937 —18 23 251 32.7 359.1 1.55746 14.86 28 210 54.4 224.6 1.60970 18 27 222 28.2 328.7 1.55122 —14.71 3 193 23.7 298.3 1.55122 —14.71 3 193 23.7 298.3 1.54970 14.64 15.3 267.8 1.54820 14.64 17 164 19.3 267.8 1.54820 14.64 17 18.54820 17 27 18.8 237.4 1.54820 14.58 11 135 14.8 237.4 1.54381 —14.55 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60991 18 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60991 18 15 166 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 271 38.0 11.8 1.53696 14.43 24 201 56.1 206.8 1.60784 17 272 38.0 11.8 1.53696 —14.41 23 48 1.4 146.2 1.53696 —14.41 26 7 24.0 11.6 1.60565 17 223 242 33.6 341.4 1.53696 —14.41 28 172 51.8 176.4 1.60656 17 223 243 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17										17.96
17					-		, ,	_		17.98
19 280 37.2 29.5 1.55904 —14.90 26 45 26.6 59.8 1.60937 —18 23 251 32.7 359.1 1.55746 14.86 28 210 54.4 224.6 1.60997 18 25 57 0.4 163.9 1.55276 14.74 347 17.9 358.9 1.61029 18 37 23.7 298.3 1.55122 —14.71 3 193 23.7 298.3 1.54820 14.64 15 328 1.54820 14.64 12 289 9.2 298.1 1.61012 18 329 47.0 72.6 1.54525 14.58 14.58 13 300 42.5 42.2 1.54239 14.52 13 300 42.5 42.2 1.54239 14.49 20 231 0.5 237.2 1.60887 17 271 38.0 11.8 1.53962 14.46 12 289 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 271 38.0 11.8 1.53696 —14.41 28 172 51.8 176.4 1.60656 17 23 48 1.4 1.53568 14.39 25 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 271 38.0 11.8 1.53668 14.39 25 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 242 33.6 341.4 1.53568 14.39 28 172 51.8 176.4 1.60656 17 22 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17 2 212 212 212 212 212 212 212 212 21			1					_		18.00
21 86 4.9 194.3 1.55746 14.86 23 210 54.4 224.6 1.60970 18 23 251 32.7 359.1 1.55588 14.82 25 57 0.4 163.9 1.555431 14.78 Dex. 2 181 50.1 194.1 1.61016 18 27 222 28.2 328.7 1.555276 14.74 4 347 17.9 358.9 1.61029 18 3193 23.7 298.3 1.554970 14.67 8 318 13.5 328.5 1.61035 18 358 51.5 103.0 1.54820 14.64 10 123 41.4 133.3 1.61027 18 329 47.0 72.6 1.54525 14.58 11 135 14.8 237.4 1.54381 14.55 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60991 18 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 271 38.0 11.8 1.53962 14.46 22 236 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 236 28.3 42.0 1.60839 17 271 38.0 11.8 1.53962 14.46 22 242 33.6 341.4 1.53696 14.49 24 201 56.1 206.8 1.60784 17 22 242 33.6 341.4 1.53696 14.49 25 213 29.1 311.0 1.53442 14.37 30 338 19.7 341.2 1.60583 17	•						239 58.8			18.02
23 251 32.7 359.1 1.55588 14.82 30 16 22.2 29.4 1.60997 18 25 57 0.4 163.9 1.55431 14.78 14.74 1.61016 18 18 27 222 28.2 328.7 1.55276 14.74 4 347 17.9 358.9 1.61029 18 193 23.7 298.3 1.55122 14.71 6 152 45.7 163.7 1.61035 18 193 23.7 298.3 1.54970 14.67 8 318 13.5 328.5 1.61034 18 164 19.3 267.8 1.54820 14.64 10 123 41.4 133.3 1.61027 18 135 14.8 237.4 1.54525 14.58 14 94 37.0 102.9 1.60991 18 13 300 42.5 42.2 1.54239 14.55 18 65 32.7 72.4 1.60963 18 15 166 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 23 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 23 48 1.4 146.2 1.53442 -14.37 30 338 19.7 341.2 1.60583 17 1.60583	-	0.6				1				- 18.03
25 57 0.4 163.9 1.55431 14.78 Dez. 2 181 50.1 194.1 1.61016 18 27 222 28.2 328.7 1.55276 14.74 4 347 17.9 358.9 1.61029 18 März 1 27 55.9 133.5 1.55122 -14.71 6 152 45.7 163.7 1.61035 -18 3 193 23.7 298.3 1.54970 14.67 8 318 13.5 328.5 1.61034 18 5 358 51.5 103.0 1.54820 14.64 10 123 41.4 133.3 1.61027 18 7 164 19.3 267.8 1.54671 14.61 12 289 9.2 298.1 1.61012 18 9 329 47.0 72.6 1.54525 14.58 14 94 37.0 102.9 1.60991 18 11 135 14.8 237.4 1.54381 -14.55 16 260 4.8 267.7 1.60963 -18 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 23 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 24 242 33.6 341.4 1.53696 -14.41 26 7 24.0 11.6 1.60723 -17 24 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17										18.04
27 222 28.2 328.7 1.55276 14.74 4 347 17.9 358.9 1.61029 18 März 1 27 55.9 133.5 1.55122 -14.71 6 152 45.7 163.7 1.61035 -18 3 193 23.7 298.3 1.54970 14.67 8 318 13.5 328.5 1.61034 18 5 358 51.5 103.0 1.54820 14.64 10 123 41.4 133.3 1.61027 18 9 329 47.0 72.6 1.54525 14.58 14 94 37.0 102.9 1.60991 18 11 135 14.8 237.4 1.54381 -14.55 16 260 4.8 267.7 1.60963 -18 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60963 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 23 48 1.4 146.2 1.53568 14.39 25 213 29.1 311.0 1.53442 -14.37 30 338 19.7 341.2 1.60583 17	_	1 - 1								18.05
März I 27 55.9 133.5 1.55122 —14.71 6 152 45.7 163.7 1.61035 —18 3 193 23.7 298.3 1.54970 14.67 8 318 13.5 328.5 1.61034 18 5 358 51.5 103.0 1.54820 14.64 10 123 41.4 133.3 1.61027 18 7 164 19.3 267.8 1.54671 14.61 12 289 9.2 298.1 1.61012 18 9 329 47.0 72.6 1.54525 14.58 14 94 37.0 102.9 1.60991 18 11 135 14.8 237.4 1.54381 —14.55 16 260 4.8 267.7 1.60963 —18 13 300 42.5 42.2 1.54239 14.452 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 17 271 38.0 11.8 1.53828 14.43 24 201 56.1 206.8 1.60784 17 21 242 33.6 341.4 1.53696 14.41 26 7 24.0<	_						-			18.06
3 193 23.7 298.3 1.54970 14.67 8 318 13.5 328.5 1.61034 18 5 358 51.5 103.0 1.54820 14.64 10 123 41.4 133.3 1.61027 18 7 164 19.3 267.8 1.54525 14.61 12 289 9.2 298.1 1.61012 18 9 329 47.0 72.6 1.54525 14.58 14 94 37.0 102.9 1.60991 18 11 135 14.8 237.4 1.54381 -14.55 16 260 4.8 267.7 1.60963 -18 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 17 271 38.0 11.8 1.53828 14.43 24 201 56.1 206.8 1.60784	Mäng -	H								18.06
5 358 51.5 103.0 1.54820 14.64 10 123 41.4 133.3 1.61027 18 7 164 19.3 267.8 1.54671 14.61 12 289 9.2 298.1 1.61012 18 9 329 47.0 72.6 1.54525 14.58 14 94 37.0 102.9 1.60991 18 11 135 14.8 237.4 1.54381 -14.55 16 260 4.8 267.7 1.60993 -18 13 300 42.5 42.2 1.54239 14.452 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60724<										-18.06
7 164 19.3 267.8 1.54671 14.61 12 289 9.2 298.1 1.61012 18 9 329 47.0 72.6 1.54525 14.58 14 94 37.0 102.9 1.60991 18 11 135 14.8 237.4 1.54381 14.55 16 260 4.8 267.7 1.60963 -18 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 21 242 33.6 341.4 1.53696 -14.41 26 7 24.0 11.6 1.60723 -17 23 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 25 213 29.1 311.0 1.53442 -14.37 30 338 19.7 341.2 1.60583 17						,			_	18.06 18.06
9 329 47.0 72.6 1.54525 14.58 14 94 37.0 102.9 1.60991 18 11 135 14.8 237.4 1.54381 14.55 16 260 4.8 267.7 1.60963 -18 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60889 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 21 242 33.6 341.4 1.53696 -14.41 26 7 24.0 11.6 1.60723 -17 23 48 1.4 146.2 1.53568 14.39 28 172.51.8 176.4 1.60656 17										
11 135 14.8 237.4 1.54381 =14.55 16 260 4.8 267.7 1.60963 = 18 13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60889 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 21 242 33.6 341.4 1.53696 —14.41 26 7 24.0 11.6 1.60723 —17 23 48 1.4 146.2 1.53568 14.39 28 172.51.8 176.4 1.60656 17 25 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583	· ·				_					18.05
13 300 42.5 42.2 1.54239 14.52 18 65 32.7 72.4 1.60928 18 15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.60887 17 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 21 242 33.6 341.4 1.53696 —14.41 26 7 24.0 11.6 1.60723 —17 23 48 1.4 146.2 1.53568 14.39 28 172.51.8 176.4 1.60656 17 25 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17						1 .				- 18.03
15 106 10.3 207.0 1.54099 14.49 20 231 0.5 237.2 1.66887 17 17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 21 242 33.6 341.4 1.53696 —14.41 26 7 24.0 11.6 1.60723 —17 23 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 25 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17			1							18.01
17 271 38.0 11.8 1.53962 14.46 22 36 28.3 42.0 1.60839 17 19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 21 242 33.6 341.4 1.53696 -14.41 26 7 24.0 11.6 1.60723 -17 23 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 25 213 29.1 311.0 1.53442 -14.37 30 338 19.7 341.2 1.60583 17	_									
19 77 5.8 176.6 1.53828 14.43 24 201 56.1 206.8 1.60784 17 21 242 33.6 341.4 1.53696 —14.41 26 7 24.0 11.6 1.60723 —17 23 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 25 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17										17.99
21 242 33.6 341.4 1.53696 —14.41 26 7 24.0 11.6 1.60723 —17 23 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 25 213 29.1 311.0 1.53442 —14.37 30 338 19.7 341.2 1.60583 17										17.97 17.95
23 48 1.4 146.2 1.53568 14.39 28 172 51.8 176.4 1.60656 17 25 213 29.1 311.0 1.53442 -14.37 30 338 19.7 341.2 1.60583 17										
25 213 29.1 311.0 1.53442 -14.37 30 338 19.7 341.2 1.60583 17										
32 143 4/13 140.0 1.00304 -1/	45	415 49.1	311.0	1.03444	-4.3/					
		1				34	***> 4/.>	140.0	1.00504	17.03

ENCELADUS.

M	v-M	$\log \frac{r}{a}$	M	M	v-M	$\log \frac{r}{a}$	M
0	+ 0.0—	9.99800	36°	90°	+31.6—	0.00001	27°
2	1.1	9.99800	358	92	31.6	0.00008	268
4	2.2	9.99800	356	94	31.5	0.00015	266
6	3.3	9.99801	354	96	31.4	0.00022	264
8	4.4	9.99802	352	98	31.3	0.00029	262
10	-1- 5.5	9.99803	350	100	+31.1-	0.00035	2 60
12	6.6	9.99804	348	102	30.9	0.00042	258
14	7.7	9.99806	346	104	30.6	0.00049	256
16	8.8	9.99808	344	106	30.3	0.00056	254
18	9.8	9.99810	342	108	30.0	0.00062	252
20	+10.9-	9.99812	340	110	-+ 29. 7—	0.00069	250
22	11.9	9.99814	338	112	29.3	0.00075	248
24	12.9	9.99817	336	114	28.8	0.00082	246
2 6	13.9	9.99820	334	116	28.3	0.00088	244
28	14.9	9.99823	332	118	27.8	0.00094	242
30	+ 15.9-	9.99827	330	120	+27.3-	0.00100	2 40
32	16.8	9.99830	328	122	2 6.7	0.00106	238
34	17.8	9.99834	326	124	26.1	0.00112	236
36	18.7	9.99838	324	126	25.5	0.00118	234
38	19.6	9.99842	322	128	24.8	0.00123	232
40	-+· 2 0.4—	9.99847	320	130	+-24.I—	0.00129	230
42	21.3	9.99852	318	132	23.4	0.00134	228
44	22.I	9.99856	316	134	22.7	0.00139	226
46	22.8	9.99861	314	136	21.9	0.00144	224
48	23.6	9.99866	312	138	21.1	0.00148	222
50	1-24.3	9.99872	310	140	+-20.2-	0.00153	220
52	25.0	9.99877	308	1.12	19.4	0.00157	218
54	25.7	9.99883	306	144	18.5	0.00162	2,16
56	26.3	9.99889	304	146	17.6	0.00166	214
58	26.9	9.99895	302	148	16.7	0.00169	212
60	+27.5-	9.99901	300	150	+15.7-	0.00173	210
62	28.0	9.99907	298	152	14.8	0.00176	208
64	28.5	9.99913	296	154	13.8	0.00179	206
66 68	29.0	9.99919	294	156	12.8	0.00182	204
	29.4	9.99926	292	158	11.8	0.00185	202
70	+29.8-	9.99932	290 288	160	+-10.8—	0.00187	200
72	30.1	9.99939	286	162	9.7	0.00190	198
74	30.4	9.99946	284	164	8.7	0.00192	196
76	30.7	9.99952	282	166	7.6	0.00193	194
78 - 80	31.0	9.99959	280 280	168	6.5	0.00195	192
82	+ 31.2	9.99966	278	170	- - 5.5—	0.00196	190
84	31.3	9.99973 9.99980		172	4.4	0.00197	186
86	31.5 31.6	9.99987	276	174	3·3 2.2	0.00100	184
88	31.6 31.6		274	176	1.1	0.00100	182
	+31.6-	9.99994 0.00001	272	178		0.00199	180
90	7-31.0-	0.00001	270	190	o.o	0.00199	100

TETHYS.

						/ / >	
O _p	L	$\log \frac{a(\rho)}{\rho}$	$\frac{a(\rho)}{2}\sin B$	O _p	L	$\log \frac{a(\rho)}{\rho}$	$\frac{a(\rho)}{\rho}\sin B$
		ρ	Р			P	P
Jan. o	254 41.2	1.68890	-19.96	Okt. 7	10 1.2	1.67607	-21.08
2	276 4.9	1.68772	19.90	9	31 2 4.9	1.67757	21.15
4	297 28.6	1.68651	19.84	11	52 48.6	1.67905	21.22
6	318 52.3	1.68525	19.78	13	74 12.3	1.68051	21.29
8	340 16.0	1.68395	19.71	15	95 36.1	1.68194	21.35
10	I 39.7	1.68261	-19.65	17	116 59.8	1.68334	-21.42
12	23 3.4	1.68124	19.58	19	138 23.5	1.68471	21.48
14	44 27.2	1.67984	19.52	21	159 47.2	1.68605	21.55
16	65 50.9	1.67841	19.45	23	181 10.9	1.68735	21.61
18	87 14.6	1.67695	19.39	25	202 34.6	1.68862	21.67
20	108 38.3	1.67547	19.32	27	223 58.3	1.68984	-21.73
22	130 2.1	1.67397	19.26	29	245 22.0	1.69102	21.79
24	151 25.8	1.67244	19.20	31	266 45.8	1.69216	21.84
2 6	172 49.5	1.67090	19.14	Nov. 2	288 9.5	1.69325	21.89
28	194 13.2	1.66934	19.07	4	309 33.2	1.69430	21.94
30	215 37.0	1.66777	-19.01	6	330 56.9	1.69529	-21.99
Febr. 1	237 0.7	1.66618	18.95	8	352 20.6	1.69623	22.04
3	258 24.4	1.66459	18.89	10	13 44.3	1.69711	22.08
5	279 48.2	1.66299	18.83	12	35 8.0	1.69794	22.12
7	301 11.9	1.66138	18.77	14	56 31.7	1.69872	22.16
9	322 35.6	1.65977	-18.72	16	77 55.5	1.69943	-22.20
11	343 59-3	1.65816	18.66	18	99 19.2	1.70008	22.23
13	5 23.0	1.65655	18.61	20	120 42.9	1.70068	22.26
15	26 46.7	1.65494	18.55	22	142 6.6	1.70121	22.28
17	48 10.5	1.65334	18.50 —18.45	24	163 30.3	1.70167	22.30
19 21	69 34.2	1.65174	18.40	26 28	184 54.0 206 17.7	1.70207	-22.32
	9° 57.9 112 21.6	1.64858	18.35		200 17.7	1.70240 1.70267	22.33
23 25		1.64701	18.30	Dez. 2		1.70286	22.34
27	133 45.3 155 9.0	1.64546	18.25		2 49 5.2 2 70 2 8.9	1.70200	22.35 22.35
März 1	176 32.7	1.64392	-18.21	6	291 52.7	1.70305	-22.35
3	197 56.4	1.64240	18.17	8	313 16.4	1.70304	22.35
5	219 20.1	1.64090	18.13	10	334 40.I	1.70297	22.35
7	240 43.8	1.63941	18.09	12	356 3.8	1.70282	22.34
9	262 7.5	1.63795	18.05	14	17 27.5	1.70261	22.33
11	283 31.2	1.63651	18.01	16	38 51.2	1.70233	-22.32
13	304 54.9	1.63509	17.98	18	60 15.0	1.70198	22.30
15	326 18.6	1.63369	17.94	20	81 38.7	1.70157	22.28
17	347 42.3	1.63232	17.91	22	103 2.4	1.70109	22.25
19	9 6.0	1.63098	17.87	24	124 26.1	1.70054	22.22
21	30 29.8	1.62966	-17.84	26	145 49.8	1.69993	-22.19
23	51 53.5	1.62838	17.81	28	167 13.5	1.69926	22.15
25	73 17.2	1.62712	-17.79	30	188 37.2	1.69853	22.11
				32	210 0.9	1.69774	-22.07
							,

DIONE.

Oh	L	М	$\log \frac{a(\bar{\rho})}{\rho}$	$\frac{a(\rho)}{\rho}\sin B$	O ^h	L	M	$\log \frac{a(\rho)}{\rho}$	$\frac{a(\rho)}{\rho}\sin B$
Jan. o	348° 53.2	203.4	1.79637	-25.56	Okt. 7	98° 39.3	19.4	1.78354	-27.00
2,	251 57.4		1.79519	25.48	9	I 43.5	282.3	1.78504	27.08
4	155 1.6	99.2	1.79398	25.40	11	264 47.7	185.2	1.78652	27.16
6	58 5.8		1.79272	25.32	13	167 51.9	88.1	1.78798	27.25
8	321 10.0	-	1.79142	25.24	15		351.0	1.78941	27.34
10	224 14.2		1.79008	-25.16	17	-	253.9	1.79081	-27.43
12	127 18.4	70.8	1.78871	25.08	19		156.8	1.79218	27.52
14		333.7	1.78731	25.00	21	140 8.6	59.7	1.79352	27.60
16	293 26.7		1.78588	24.91	23	43 12.8		1.79482	27.68
1.8	196 30.9	139.5	1.78442	24.83	25	306 17.0	225.5	1.79609	27.76
20	99 35.1	42.4	1.78294	-24.74	27	209 21.1	128.4	1.79731	-27.84
22	2 39.3	305.3	1.78144	2 4.66	29	112 25.3	31.3	1.79849	27.91
24	265 43.5	208.2	1.77991	24.58	31	15 29.5	294.2	1.79963	27.98
26	168 47.7	III.I	1.77837	24.50	Nov. 2	278 33.7	197.1	1.80072	28.05
28	71 51.9	14.0	1.77681	24.42	4	181 37.8	100.0	1.80177	28.11
30	334 56.1	276.9	1.77524	- 24.34	6	84 42.0	2.9	1.80276	-28.17
Febr. 1	238 0.2	179.8	1.77365	24.27	8	347 46.2	265.8	1.80370	28.23
3	141 4.4	82.7	1.77206	24.19	10	250 50.4	168.7	1.80458	28.28
5	44 8.6	J . J	1.77046	24.12	12	153 54.6	71.6	1.80541	28.33
7	307 12.8	248.5	1.76885	24.04	14	56 58.8	334.5	1.80619	28.38
9	210 17.0	151.4	1.76724	-23.97	16	320 2.9	237.4	1.80690	-28.42
11	113 21.2	54.3	1.76563	23.90	18	223 7.1	140.3	1.80755	28.46
13	16 25.4	317.2	1.76402	23.83	20	126 11.3	43.2	1.80815	28.50
15	279 29.6		1.76241	23.76	22	29 15.5	306.1	1.80868	28.53
17	182 33.7		1.76081	23.69	24	292 19.7	_	1.80914	28.56
19	85 37.9	25.9	1.75921	-23.62	26	195 23.9	111.9	1.80954	-28.58
2.1	348 42.1	288.8	1.75763	23.56	28	98 28.0	14.8	1.80987	28.60
23	251 46.3	191.7	1.75605	23.50	30	1 32.2	277.7	1.81014	28.62
25	154 50.5	94.6	1.75448	23.44	Dez. 2	264 36.4	180.6	1.81033	28.63
$M\ddot{a}rz_{1}^{27}$	57 54.7		1.75293	23.38	4	167 40.6		1.81046	28.64
	320 58.9		1.75139	-23.32	8	70 44.7		1.81052	-28.64
3	224 3.1	163.3	1.74987	23.27		333 48.9		1.81051	28.64
5	127 7.2	66.2	1.74837	23.22	IO	236 53.1	152.2		28.63 28.62
7	30 11.4	-	1.74688	23.17	12	139 57.3	55.1 318.0	1.81029	28.60
9		232.0	1.74542	23.12	14	43 I.5 306 5.7	_	1.80980	-28.58
II		134.9	1.74398	-23.07 23.02	18	306 5.7 209 9.8		1.80945	28.56
13	99 2 4.0 2 28.2	37.8	1.74256	22.98	20	112 14.0	26.7	1.80945	28.53
,	265 32.4			22 .94	20	15 18.2			28.50
17	168 36.6		1.73979	22.90	24	278 22 .4			28.46
19	71 40.7		1.73713	—22.86	26	181 26.6			-28.42
23			1.73585	22.82	28	84 30.8			28.37
25	237 49.1		1.73459	-22.78	30	347 34.9		1.80600	28.32
~3	~5/ 49 ·1	-/3.4	-1/3439		32	250 39.I		1.80521	-28.27
					,	.,,	7.1		

DIONE.

M	v-M	$\log \frac{r}{a}$	М	M	v-M	$\log \frac{r}{a}$	M
o	+ 0.0—	9.99913	360	90	+13.8-	0.0000	270°
2	0.5	9.99913	358	92	13.7	0.00003	268
4	1.0	9.99913	356	94	13.7	0.00006	266
6	1.4	9.99913	354	96	13.7	0.00009	264
8	1.9	9.99914	352	98	13.6	0.00012	262
10	+ 2.4-	9.99914	350	100	+13.5-	0.00015	260
12	2.9	9.99915	348	102	13.4	0.00018	258
14	3.3	9.99916	346	104	13.3	0.00021	256
16	3.8	9.99916	344	106	13.2	0.00024	254
18	4.3	9.99917	342	108	13.1	0.00027	252
20	+ 4.7-	9.99918	340	110	+ 12.9—	0.00030	250
22	5.2	9.99919	338	112	12.7	0.00033	248
24	5.6	9.99921	336	114	12.5	0.00035	246
26	6.0	9.99922	334	116	12.3	0.00038	244
28	6.5	9.99923	332	118	12.1	0,00041	242
30	+ 6.9-	9.99925	330	120	+11.9-	0.00044	240
32	7.3	9.99926	328	122	11.6	0.00046	238
34	7 .7	9.99928	326	124	11.4	0.00049	236
36	8.1	9.99930	324	126	II.I	0.00051	234
38	8.5	9.99931	322	128	10.8	0.00053	232
40	+ 8.9-	9.99933	320	130	+10.5	0.00056	230
42	9.2	9.99935	318	132	10.2	0.00058	228
44	9.6	9.99937	316	134	9.9	0.00060	226
46	9.9	9.99940	314	136	9.5	0.00062	224
48	10.2	9.99942	312	138	9.2	0.00065	222
50	4-10.6	9.99944	310	140	+ 8.8-	0.00067	220
52	10.9	9.99947	308	142	8.4	0.00068	218
54	11.1	9.99949	306	144	8.1	0.00070	216
56	11.4	9.99951	304	146	7.7	0.00072	214
58	11.7	9.99954	302	148	7.3	0.00074	212
60	+11.9-	9.99957	300	150	+ 6.9	0.00075	210
62	12.2	9.99959	298	152	6.4	0.00077	208
64	12.4	9.99962	296	154	6.0	0.00078	206
66	12.6	9.99965	294	156	5.6	0.00079	204
68	12.8	9.99967	292	158	5.1	0.00080	202
70	+12.9-	9.99970	290	160	+ 4.7-	0.00081	200
72	13.1	9.99973	288	162	4.2	0.00082	198
74	13.2	9.99976	286	164	3.8	0.00083	196
76	13.3	9.99979	284	166	3.3	0.00084	194
78	13.4	9.99982	282	168	2.9	0.00085	192
80	+13.5-	9.99985	280	170	1 2.4-	0.00085	190
82	13.6	9.99988	278	172	1.9	0.00086	188
84	13.7	9.99991	276	174	1.4	0.00086	186
86	13.7	9.99994	274	176	1.0	0.00086	184
88	13.7	9.99997	272	178	0.5	0.00087	182
00	+128	0.00000	270	т8о	+ 00-	0.00087	T80

RHEA.

Jun. 0 341 9.2 282.1 1.94023 35.70 Okt. 7 334 20.8 26.6 1.94023 35.59 4 299 54.8 240.7 1.93020 35.48 11 293 6.4 226.2 1.93160 37.95 8 258 40.4 199.4 1.93646 35.37 15 251 52.1 52.2 25.6 1.93302 38.07 10 58 3.2 35.87 1.93512 -35.14 17 51 14.1 16 48.8 317.4 1.93235 34.91 17 51 14.1 1.93456 38.43 35.02 19 210 37.5 143.5 1.93782 38.13 38.19 10 10 33.52 19 210 37.5 143.5 1.93782 38.43 38.19 11 10 30.2 11 20.2 1.93856 38.43 38.19 21 10 20.2 1.93456 38.43 39.5 <t< th=""><th>O_p</th><th>L</th><th>М</th><th>$\log \frac{a(p)}{p}$</th><th>$\frac{a(\rho)}{\rho}\sin B$</th><th>oh</th><th>L</th><th>M</th><th>$\log \frac{a(\rho)}{\rho}$</th><th>$\frac{a(\rho)}{\rho}\sin B$</th></t<>	O _p	L	М	$\log \frac{a(p)}{p}$	$\frac{a(\rho)}{\rho}\sin B$	oh	L	M	$\log \frac{a(\rho)}{\rho}$	$\frac{a(\rho)}{\rho}\sin B$
2 140 32.0 81.4 1,94023 35.59 9 133 43.6 66.9 1,93000 37.83 4 299 54.8 40.7 1,93976 35.37 13 92 40.2 25.6 1,93126 37.95 6 9 17.6 40.1 1,93776 35.37 13 92 40.2 25.6 1,93126 38.07 8 258 40.4 199.4 1,93646 35.25 110 58 3.2 358.7 1,93512 35.02 110 58 3.2 358.7 1,93512 35.02 14 16 48.8 31.7.4 1,93255 34.91 210 50.3 30.9 1,93856 38.54 16 176 11.6 116.7 1,93092 34.79 18 335 34.4 276. 1,92946 34.67 22 110 0.3 30.29 1,93856 38.65 22 294 20.0 234.7 1,92048 34.47 24.9 34.8 34.0 1,94945 34.33 26 253 5.6 193.3 1,92485 34.91 21 20.3 36.9 1,94856 22 294 20.0 234.7 1,92048 34.41 24.9 34.8 34.0 1,94945 34.33 26 253 5.6 193.3 1,92341 34.22 28 52 28.4 352.6 1,92185 34.91 30 211 51.2 152.0 1,92028 34.00 21.5 1.1 14.0 311.3 1,91869 33.89 33.89 31.79 36.8 110.6 1,91710 33.89 5 329 59.6 26.99 1,91550 33.68 7 129 22.4 69.3 1,91389 33.58 9 288 45.2 22.46 69.3 1,91389 33.58 9 288 45.2 22.46 69.3 1,91389 33.58 17 2.6 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	Jan. o	341° 0.2	282.1	1.04141	-35.70	Okt. 7	334° 20.8	267.6	1.02858	-37.70
4 299 54.8 240.7 1.93902 35.48 11 293 64. 226.2 1.93156 37.95 38.07 8 258 40.4 109.4 1.93646 35.25 15 251 52.0 184.9 1.93458 38.19 12 217 26.0 158.0 1.93375 35.02 19 210 37.5 143.5 1.93722 38.43 14 16 48.8 317.4 1.93235 34.91 1 10 0.3 32.9 1.93856 38.56 18 335 34.4 276.0 1.93964 34.67 22 24 20.0 234.7 1.92468 34.44 24 24 24 24 24 24 24										
6 99 17.6 40.1 193776 35.37 13 92 29.2 25.6 1.93302 38.07 8 288 40.4 199.4 1.93546 35.25 15 251 52.0 184.9 1.93435 38.19 12 217 26.0 158.0 158.0 193375 35.02 19 210 37.5 143.5 1.93782 38.43 14 16 48.8 317.4 1.93235 34.91 21 10 0.3 302.9 1.93856 38.54 335 34.4 276.0 1.93296 34.79 23 169 23.1 102.2 1.93863 38.54 32.2 294 20.0 234.7 1.05248 34.44 29 287 31.5 22.0 1.93863 38.57 22 294 20.0 234.7 1.05248 34.44 29 287 31.5 22.0 1.94353 38.97 22 294 20.0 234.7 1.05248 34.44 29 287 31.5 22.0 1.94353 38.97 24 24 93 42.8 34.0 1.92495 34.33 26 253 5.6 193.3 1.92495 34.31 34.21 24 24 25.2 28.4 352.6 1.93234 34.21 34.22 28 52 28.4 352.6 1.93234 34.21 34.22 28 52 28.4 352.6 1.93235 33.89 34.01 30.21 51.2 15.2 15.20 1.90208 33.89 3 5.3 49.1 11 14.0 311.3 1.91869 33.89 8 4 25.5 26.8 1.9487.4 39.42 39.50 39.50 39.50 39.59 6.2 29.9 1.91550 33.68 12 33.11 25.5 4 1.99467 39.45 39.5 1 18.88 8.0 27.9 1.91067 33.38 18 81 19.5 13.4 1.95259 39.75 13 247 30.8 187.2 1.99065 33.28 20 240 42.3 172.7 1.95319 39.70 240 616.3 145.9 1.90585 33.09 23 34.4 24.7 26.3 9 1.90545 33.80 21 15.1 9.104.5 1.90585 33.09 23 34.4 24.7 26.3 9 1.90545 33.80 22 240 5.1 33.21 1.95550 39.85 30.9 23 34.2 4.7 26.3 9 1.90545 33.28 20 240 42.3 172.7 1.95319 39.85 39.50 32.5 12.3 47.5 63.2 1.90425 33.28 20 240 42.3 172.7 1.95319 39.85 39.85 19 5 39.1 305.2 1.90425 33.28 20 240 42.3 172.7 1.95319 39.85 39.85 19 5 39.1 305.2 1.90425 33.28 20 240 42.3 172.7 1.95319 39.85 39.85 30.99 23.8 23.3 1.952.2 1.90425 33.26 4 27.0 28.1 10.91019 33.85 32.5 44 24.7 26.3 9 1.90109 33.82 24 24.7 26.3 9 1.90545 33.28 22 24 0.5 1.3 32.1 1.95555 39.99 23.8 4 24.7 26.3 9 1.90545 33.28 22 24.0 5.1 33.2 1.95333 39.8 39.9 37.5 32.9 14.3 30.5 12.5 1.95333 39.9 39.9 32.5 12.5 1.89026 32.2 1.00425 3										
8 258 40.4 199.4 1.93646 35.25 15 251 52.5 18.49 1.93445 38.19 10 58 3.2 358.7 1.93512 -35.14 17 51 14.7 34.42 1.93585 -38.31 14 16 4.88 317.4 1.93235 34.91 21 10 0.3 302.9 1.93856 38.54 34 314 57.5 75.3 1.92798 -34.56 22 128 8.7 60.8 1.94235 38.65 22 294 20.0 234.7 1.92495 34.33 1.92411 34.22 1.94353 38.97 28 52 28.4 352.6 1.92495 34.33 1.02495 34.33 10.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.33 1.02495 34.34 1.02495 34.33 1.0										
10							_		,	
12 217 26.0 158.0 1.93375 35.02 19 210 37.5 143.5 1.93722 38.8.3 14 16 48.8 317.4 1.93235 34.91 1.93692 23.1 10 0.3 302.9 1.93856 38.56 18 35.5 44. 276.0 1.92046 34.67 25 328 45.9 261.5 1.94113 38.76 20 134 57.2 75.3 1.92798 -34.56 22 294 20.0 234.7 1.92046 34.44 24 93 42.8 34.0 1.92495 34.33 26 25 3 5.6 193.3 1.92341 34.22 28 52 28.4 352.6 1.92185 34.11 30 211 51.2 151.2 151.2 1.92028 -34.00 21.5 151.2 151.2 151.2 1.92028 -34.00 21.5 151.2 151.2 1.92028 -34.00 21.5 151.2 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 152.0 1.92028 -34.00 21.5 151.2 151.2 152.0 1.92028 -34.00 21.5 151.2 151.2 152.0 1.92028 -33.00 21.5 151.2 151.2 152.0 1.92028 -33.00 21.5 151.2 151.2 152.0 1.92028 -33.00 21.5 151.2 151.2 152.0 1.92028 -33.00 21.5 151.2 151.2 151.2 1.91550 33.68 11.0 163 48.3 90.1 1.9467 39.45 3						-				
14						3				
16 176 11.6 11.67 1.93c92 34.79 23 169 23.1 102.2 1.03986 38.65 18 335 34.4 276.0 1.92046 34.67 25 328 45.9 261.5 1.94113 38.76 22 294 200 234.7 1.92648 34.44 29 287 31.5 220.2 1.94353 38.87 26 253 5.6 193.3 1.92495 34.33 31 86 54.3 19.5 1.94467 39.07 28 52 28.4 352.6 1.92185 34.11 4 45 39.99 31 1.94667 39.25 30 211 51.2 1.90208 34.00 6 205 2.7 137.5 1.94780 39.25 4 45 3.99 38.1 1.94780 39.24 4 45 3.99 1.94780 39.24 4 3.99 3.2 1.99 3.2 1.99 1.910 33.78 10 163 48.3 96.1 <						1				
18 335 34.4 276.0 1.92946 34.67 25 328 45.9 261.5 1.94113 38.76 20 134 57.2 75.3 1.92798 -34.56 27 128 8.7 60.8 1.942435 -38.87 22 294 20.0 234.7 1.92495 34.33 31.86 52.28.4 31.93.3 1.92341 34.22 28 52 28.4 352.6 1.92185 34.11 4 45 39.9 33.81 1.94576 39.16 30 211 51.2 152.0 1.92028 -34.00 6 205 2.7 137.5 1.94780 39.16 Febr. 1 11 14.0 311.3 1.91869 33.89 8 4 25.5 296.8 1.94780 39.43 Febr. 2 11 14.0 1.91128 -33.48 10 163 48.3 96.1 1.94780 39.57 12 22.4 69.3 1.91288 -33.48 16 281 56.7 214.11 1.95194								- /		
20						_				
22 294 20.0 234.7 I.92648 34.44 29 287 31.5 220.2 I.94353 38.97 26 253 5.6 193.3 1.92341 34.22 24 617.1 178.8 1.94576 39.07 30 211 51.2 152.0 1.92028 -34.00 6 205 2.7 137.5 1.94681 39.25 30 217 51.2 152.0 1.91869 33.89 8 4 25.5 296.8 1.94780 -39.34 5 329 59.6 269.9 1.91550 33.68 12 323 11.1 255.4 1.95123 39.57 7 129 22.4 69.3 1.91650 33.38 14 122 33.9 54.8 1.95123 39.57 7 129 22.4 69.3 1.91659 33.68 12 323 11.1 255.4 1.95045 39.57 11 88 8.0 27.9 1.91067 33.38 18 12 23 3.9 54 1.95123 39.64 15 46 53.6 346.6 1.90745 33.18 22 40 5.1 1.95194 39.80 17 206 16.3 145.9 1.90585 33.09 24 19 2.9 131.1 1.95248 39.92						-				
24 93 42.8 34.0 1.92495 34.33										
26			3.,			_				
28						Nov. 2	5.0			
Tebr. i						1				
Febr. I								_		
3 170 36.8 110.6 1.91710 33.78 10 163 48.3 96.1 1.94962 39.50 5 329 59.6 269.9 1.91550 33.68 112 323 11.1 255.4 1.95045 39.57 7 129 22.4 69.3 1.91389 33.58 14 122 33.9 54.8 1.95123 39.64 9 288 45.2 228.6 1.91228 -33.48 16 281 56.7 214.1 1.95194 -39.70 11 88 8.0 27.9 1.91067 33.38 18 18 19.5 13.4 1.95259 39.75 13 247 30.8 187.2 1.90906 33.28 20 240 42.3 172.7 1.95310 39.80 15 46 53.6 346.6 1.90745 33.18 22 40 5.1 332.1 1.95572 39.85 17 206 16.3 145.9 1.90585 33.00 24 199 27.9 131.4 1.95418 39.89 19 5 39.1 10,04257 32.00 21 165 1.9 104.5 1.90267 32.91 28 158 13.5 90.0 1.95491 39.95 23 324 24.7 263.9 1.90109 32.82 24 199 27.9 131.4 1.95418 39.95 28 158 13.5 90.0 1.95491 39.95 28 158 13.5 90.0 1.95588 39.97 29 283 10.3 222.5 1.89597 32.66 März 1 82 33.1 21.8 1.89643 32.50 3 241 55.9 181.2 1.89491 32.50 3 241 55.9 181.2 1.89491 32.50 3 241 55.9 181.2 1.89491 32.36 3 20 41.5 139.8 1.89491 32.36 7 200 41.5 139.8 1.89491 32.36 11 159 27.1 98.5 1.88902 32.36 11 159 27.1 98.5 1.88902 32.36 11 159 27.1 188620 32.03 12 13 318 49.9 257.8 1.88760 32.05 13 18 12.7 57.1 1.88620 32.09 13 318 49.9 257.8 1.88760 32.05 13 18 12.7 57.1 1.88620 32.09 14 277 35.5 216.4 1.88483 32.03 22 270 47.0 20.1 1.9 1.95360 39.99 14 236 21.1 175.1 1.88483 32.03 22 270 47.0 20.1 1.9 1.95360 39.79 19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.74 25 195 6.7 133.7 1.88089 31.86 28 28 55.4 319.9 1.95104 39.54		_	-			ł		0, 5		
5 329 59.6 269.9 1.91550 33.68 12 323 11.1 255.4 1.95045 39.57 7 129 22.4 69.3 1.91389 33.58 14 122 33.9 54.8 1.95123 39.64 9 288 45.2 228.6 1.91228 -33.48 16 281 56.7 214.1 1.95194 -39.70 11 88 8.0 27.9 1.91067 33.38 18 11.05.1 1.95194 -39.70 13 247 30.8 187.2 1.90906 33.28 20 240 42.3 172.7 1.95319 39.80 15 46 53.6 346.6 1.90745 33.18 22 40 5.1 33.21 1.95372 39.85 17 206 163.1 145.9 1.90267 32.91 26 358 50.7 290.7 1.9548 39.92 21 165 1.9 10.45 1.90267 32.91 28 158 13.5 90.0 1.95488 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>· .</td><td></td><td></td></t<>								· .		
7 129 22.4 69.3 1.91389 33.58 14 122 23.9 54.8 1.95123 39.64 -39.70 11 88 8.0 27.9 1.91067 33.38 18 81 19.5 13.4 1.95259 39.75 33.46 15 46 53.6 346.6 1.90745 33.18 22 40 5.1 332.1 1.95372 39.85 17 206 16.3 145.9 1.90585 33.09 19 5 39.1 305.2 1.90425 -33.00 24 199 27.9 131.4 1.95418 39.89 165 165 1.9 104.5 1.90267 32.81 23 324 24.7 263.9 1.90109 32.82 28 158 13.5 90.0 1.95491 39.95 39.97 22 283 10.3 222.5 1.89797 32.66 6 75 44.6 7.3 1.95557 39.99 18.2 1.89491 32.25 1.89491 32.25 1.89491 32.25 1.89491 32.25 32.36 10 34 30.2 32.60 1.95555 39.99 1.95537 39.95 1.95537 39.9					33.68					
9 288 45.2 228.6 1.91228							2 2			
11 88 8.0 27.9 1.91067 33.38 18 19.5 13.4 1.95259 39.75 13.247 30.8 187.2 1.99906 33.28 240 42.3 172.7 1.95319 39.80 15 46 53.6 346.6 1.90745 33.18 22 40 5.1 332.1 1.95372 39.85 17 206 16.3 145.9 1.90585 33.09 24 199 27.9 131.4 1.95418 39.89 19 5 39.1 305.2 1.90425 -33.00 26 358 50.7 290.7 1.95458 39.92 21 165 1.9 104.5 1.90207 32.91 23 324 24.7 263.9 1.90109 32.82 123 47.5 63.2 1.89952 32.74 109.2 116 59.0 48.7 1.95518 39.97 27 283 10.3 222.5 1.89797 32.66 42.7 263.9 181.2 1.89491 32.50 32.50 41 18.7 340.5 1.89341 32.43 10.34 30.2 32.60 1.95550 41 18.7 340.5 1.89341 32.43 10.34 30.2 32.60 1.95556 10.95556 10.95556 10.95556 10.95556 10.95556 10.95556 10.95556 10.95548 10.95556 10.95548 10.95556 10.95548 10.95556 10.95548 10.95556 10.95548 1										
13 247 30.8 187.2 1.90906 33.28 20 240 42.3 172.7 1.95319 39.80 15 46 53.6 346.6 1.90745 33.18 22 40 5.1 332.1 1.95372 39.85 17 206 16.3 145.9 1.90585 33.09 19 5 39.1 305.2 1.90425 -33.00 21 165 1.9 104.5 1.90267 32.91 23 324 24.7 263.9 1.90109 32.82 28 158 13.5 90.0 1.95491 39.95 27 283 10.3 222.5 1.89797 32.66 März 1 82 33.1 21.8 1.89643 -32.58 32.41 55.9 181.2 1.89491 32.50 32.41 55.9 181.2 1.89491 32.50 32.36 32.41 55.9 181.2 1.89491 32.30 32.36 34.18 32.31 1.95555 39.99 11 159 27.1 98.5 1.88902 -32.22 13 318 49.9 257.8 1.88964 32.29 13 318 49.9 257.8 1.88760 32.15 118 12.7 57.1 1.88620 32.09 19 76 58.3 15.8 1.88349 31.97 21 236 21.1 175.1 1.88217 -31.91 23 24 28 28 55.4 319.9 1.95104 39.54										
15										30.80
17 206 16.3 145.9 1.90585 33.09 24 199 27.9 131.4 1.95418 39.89 19 5 39.1 305.2 1.90425 -33.00 28 158 13.5 90.0 1.95491 39.95 39.95 23 324 24.7 263.9 1.90109 32.82 27 283 10.3 222.5 1.89797 32.66 4276 21.8 208.0 1.95550 40.00 32.41 55.9 181.2 1.89643 32.50 5 41 18.7 340.5 1.89341 32.43 7 200 41.5 139.8 1.89192 32.36 12 139.8 1.89192 32.36 12 139.8 1.89491 32.29 11 159 27.1 98.5 1.88964 32.29 11 159 27.1 98.5 1.88960 32.22 16 152 38.6 84.0 1.95548 39.97 39.99 19 76 58.3 15.8 1.88483 32.03 22 270 47.0 201.9 1.95305 39.79 39.96 39.79 19 76 58.3 15.8 1.88483 31.97 21 236 21.1 175.1 1.88217 -31.91 25 195 6.7 133.7 1.87963 -31.81 30.81 30.81 30.91 39.54 39										
19										30.80
21		_								
23 324 24.7 263.9 1.90109 32.82 25 123 47.5 63.2 1.89952 32.74 Dez. 2 116 59.0 48.7 1.95518 39.97 27 283 10.3 222.5 1.89797 32.66 März 1 82 33.1 21.8 1.89643 32.50 5 41 18.7 340.5 1.89341 32.43 7 200 41.5 139.8 1.89192 32.36 7 200 41.5 139.8 1.89192 32.36 11 159 27.1 98.5 1.88906 32.29 11 159 27.1 98.5 1.88906 32.15 11 159 27.1 98.5 1.88960 32.15 11 18 12.7 57.1 1.88620 32.09 19 76 58.3 15.8 1.88483 32.03 12 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88192 31.86 23 35 43.9 334.4 1.88089 31.86 23 35 43.9 334.4 1.88089 31.86 23 35 43.9 334.4 1.88089 31.86 23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95104 39.54	-					1		-		
25 123 47.5 63.2 1.89952 32.74 Dez. 2 116 59.0 48.7 1.95537 39.99 27 283 10.3 222.5 1.89797 32.66 4 276 21.8 208.0 1.95550 40.00 3 241 55.9 181.2 1.89491 32.50 8 235 7.4 166.7 1.95555 39.99 5 41 18.7 340.5 1.89341 32.43 10 34 30.2 326.0 1.95548 39.98 34.30 32.36 12 139.8 1.89192 32.36 12 139.5 31.58 284.6 1.95512 39.97 39.97 39.97 39.97 39.95 11 159 27.1 98.5 1.88962 32.22 16 152 38.6 84.0 1.95484 39.88 15 118 12.7 57.1 1.88620 32.09 11 24.2 42.6 1.95408 39.88 17 277 35.5 216.4 1.88483 32.03 22 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.74 21 236 21.1 175.1 1.88217 -31.91 26 229 32.6 160.6 1.95244 -39.68 23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95104 39.54		-				1		_		
27 283 10.3 222.5 1.89797 32.66 März 1 82 33.1 21.8 1.89643 -32.58 6 75 44.6 7.3 1.95556 -40.00 3 241 55.9 181.2 1.89491 32.50 8 235 7.4 166.7 1.95555 39.99 5 41 18.7 340.5 1.89341 32.43 10 34 30.2 326.0 1.95548 39.98 7 200 41.5 139.8 1.89192 32.36 11 159 27.1 98.5 1.88902 -32.22 13 318 49.9 257.8 1.88760 32.15 18 12.7 57.1 1.88620 32.09 19 76 58.3 15.8 1.88483 32.03 12 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.79 19 76 58.3 15.8 1.88217 -31.91 26 229 32.6 160.6 1.95244 -39.68 23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95104 39.54		-			-		1			
März I 82 33.1 21.8 1.89643 —32.58 6 75 44.6 7.3 1.95556 —40.00 3 241 55.9 181.2 1.89491 32.50 8 235 7.4 166.7 1.95555 39.99 5 41 18.7 340.5 1.89341 32.43 10 34 30.2 326.0 1.95548 39.98 7 200 41.5 139.8 1.89192 32.36 12 193 53.0 125.3 1.95533 39.97 9 0 4.3 299.1 1.89046 32.29 14 353 15.8 284.6 1.95512 39.95 11 159 27.1 98.5 1.88902 —32.22 16 152 38.6 84.0 1.95484 —39.92 13 318 49.9 257.8 1.88620 32.15 18 312 1.4 243.3 1.95409 39.88 15 118 12.7 57.1 1.88620 32.09 20 111 24.2 42.6 1.95408 39.79 19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.74 21 236 21.1 175.1 1.88217 <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			_							
3 241 55.9 181.2 1.89491 32.50 8 235 7.4 166.7 1.95555 39.99 5 41 18.7 340.5 1.89341 32.43 10 34 30.2 326.0 1.95548 39.98 7 200 41.5 139.8 1.89192 32.36 12 193 53.0 125.3 1.95533 39.97 9 0 4.3 299.1 1.89046 32.29 14 353 15.8 284.6 1.95512 39.95 11 159 27.1 98.5 1.88902 -32.22 16 152 38.6 84.0 1.95484 -39.92 13 318 49.9 257.8 1.88760 32.15 18 312 1.4 243.3 1.95409 39.88 15 118 12.7 57.1 1.88620 32.09 20 111 24.2 42.6 1.95408 39.84 17 277 35.5 216.4 1.88483 32.03 22 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88217 -31.91 26 229 32.6 160.6			_							
5 41 18.7 340.5 1.89341 32.43 10 34 30.2 326.0 1.95548 39.98 7 200 41.5 139.8 1.89192 32.36 12 193 53.0 125.3 1.95533 39.97 9 0 4.3 299.1 1.89046 32.29 14 353 15.8 284.6 1.95512 39.95 11 159 27.1 98.5 1.88902 -32.22 16 152 38.6 84.0 1.95484 -39.92 13 318 49.9 257.8 1.88620 32.15 18 312 1.4 243.3 1.95484 -39.92 15 118 12.7 57.1 1.88620 32.09 20 111 24.2 42.6 1.95408 39.88 17 277 35.5 216.4 1.88483 32.03 22 270 470 201.9 1.95360 39.79 19 76 58.3 15.8 1.88217 -31.91 26 229 32.6 160.6 </td <td></td> <td>55</td> <td></td> <td></td> <td></td> <td>8</td> <td></td> <td></td> <td></td> <td></td>		55				8				
7 200 41.5 139.8 1.89192 32.36 12 193 53.0 125.3 1.95533 39.97 9 0 4.3 299.1 1.89046 32.29 14 353 15.8 284.6 1.95512 39.95 11 159 27.1 98.5 1.88902 -32.22 16 152 38.6 84.0 1.95484 -39.92 13 318 49.9 257.8 1.88600 32.15 18 312 1.4 243.3 1.95494 39.88 15 118 12.7 57.1 1.88620 32.09 20 111 24.2 42.6 1.95408 39.88 17 277 35.5 216.4 1.88483 32.03 22 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.74 21 236 21.1 175.1 1.88217 -31.91 26 229 32.6 160.6 <td></td> <td></td> <td></td> <td></td> <td></td> <td>10</td> <td></td> <td></td> <td></td> <td></td>						10				
9 0 4.3 299.1 1.89046 32.29 14 353 15.8 284.6 1.95512 39.95 11 159 27.1 98.5 1.88902 -32.22 16 152 38.6 84.0 1.95484 -39.92 13 318 49.9 257.8 1.88620 32.15 18 312 1.4 243.3 1.95449 39.88 15 118 12.7 57.1 1.88620 32.09 20 111 24.2 42.6 1.95408 39.84 17 277 35.5 216.4 1.88483 32.03 22 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88247 -31.91 26 229 32.6 160.6 1.95244 -39.68 23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95177 39.61 25 195 6.7 133.7 1.87963 -31.81 30 188 18.2 119.2 1.95104 39.54								-		l .
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						1				
13 318 49.9 257.8 1.88760 32.15 18 312 1.4 243.3 1.95449 39.88 15 118 12.7 57.1 1.88620 32.09 20 111 24.2 42.6 1.95408 39.84 17 277 35.5 216.4 1.88483 32.03 22 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.74 21 236 21.1 175.1 1.88217 -31.91 26 229 32.6 160.6 1.95244 -39.68 23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95177 39.61 25 195 6.7 133.7 1.87963 -31.81 30 188 182 119.2 1.95104 39.54							152 38.6	84.0		
15 118 12.7 57.1 1.88620 32.09 20 111 24.2 42.6 1.95408 39.84 17 277 35.5 216.4 1.88483 32.03 22 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.74 21 236 21.1 175.1 1.88217 -31.91 26 229 32.6 160.6 1.95244 -39.68 23 35 43.9 334.4 1.88089 31.86 28 28 25.4 319.9 1.95177 39.61 25 195 6.7 133.7 1.87963 -31.81 30 188 18.2 119.2 1.95104 39.54		1 22 .	-					t .	1	
17 277 35.5 216.4 1.88483 32.03 22 270 47.0 201.9 1.95360 39.79 19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.74 21 236 21.1 175.1 1.88217 -31.91 26 229 32.6 160.6 1.95244 -39.68 23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95177 39.61 25 195 6.7 133.7 1.87963 -31.81 30 188 18.2 119.2 1.95104 39.54					1		-			
19 76 58.3 15.8 1.88349 31.97 24 70 9.8 1.3 1.95305 39.74 21 236 21.1 175.1 1.88217 -31.91 26 229 32.6 160.6 1.95244 -39.68 23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95177 39.61 25 195 6.7 133.7 1.87963 -31.81 30 188 18.2 119.2 1.95104 39.54										
21 236 21.1 175.1 1.88217 -31.91 26 229 32.6 160.6 1.95244 -39.68 23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95177 39.61 25 195 6.7 133.7 1.87963 -31.81 30 188 18.2 119.2 1.95104 39.54	•	,, 555				1				1
23 35 43.9 334.4 1.88089 31.86 28 28 55.4 319.9 1.95177 39.61 25 195 6.7 133.7 1.87963 -31.81 30 188 18.2 119.2 1.95104 39.54	-									
25 195 6.7 133.7 1.87963 -31.81 30 188 18.2 119.2 1.95104 39.54										
J. J., 1)	75 1	337	, ,, ,	-					
							31,		75 .5	37.17

RHEA.

M	v — M	$\log \frac{r}{a}$	M	M v - M		$\log \frac{\tau}{a}$	M
0	+0.0—	9.99961	360°	90	+6.2-	0.0000	2 70°
2	0.2	9.99961	358	92	6.2	0.00001	268
4	0.4	9.99961	356	94	6.2	0.00003	266
6	0.6	9.99961	354	96	6.2	0.00004	2 64
8	0.9	9.99961	352	98	6.1	0.00005	262
IO	+1.1-	9.99961	350	100	+6.1-	0.00007	2 60
12	1.3	9.99962	348	102	6.1	0.00008	258
14	1.5	9.99962	346	104	6.0	0.00009	256
16	1.7	9.99962	344	106	5.9	0.00011	254
18	1.9	9.99963	342	108	5.9	0.00012	252
20	+2.1-	9.99963	340	110	+5.8-	0.00013	250
22	2.3	9.99964	338	112	5.7	0.00015	248
24	2.5	9.99964	336	114	5.7	0.00016	246
26	2.7	9.99965	334	116	5.6	0.00017	244
28	2.9	9.99966	332	118	5.5	0.00018	242
30	+3.1	9.99966	330	120	+5.4-	0.00019	240
32	3.3	9.99967	328	122	5.2	0.00021	238
34	3.5	9.99968	326	124	5.1	0.00022	236
36	3.6	9.99968	324	126	5.0	0.00023	234
38	3.8	9.99969	322	128	4.9	0.00024	232
40	+4.0	9.99970	320	130	+4.7-	0.00025	230
42	4.1	9.99971	318	132	4.6	0.00026	228
44	4.3	9.99972	316	134	4.5	0.00027	226
46	4.5	9.99973	314	136	4.3	0.00028	224
48	4.6	9.99974	312	138	4.1	0.00029	222
50	+4.7	9.99975	310	140	-1-4.0-	0.00030	220
52	4.9	9.99976	308	142	3.8	0.00031	218
54	5.0	9.99977	306	144	3.6	0.00032	216
56	5.1	9.99978	304	146	3.5	0.00032	214
58	5.2	9.99979	302	148	3.3	0.00033	212
60	+5.4-	9.99980	300	150	+3.1-	0.00034	210
62	5.5	9.99982	298	152	2.9	0.00034	208
64	5.6	9.99983	296	154	2.7	0.00035	206
66	5.7	9.99984	294	156	2.5	0.00036	204
68	5.7	9.99985	292	158	2.3	0.00036	202
70	+5.8-	9.99987	290	160		0.00037	200
72	5.9	9.99988	288	162	1.9	0.00037	198
74	5.9	9.99989	286	164	1.7	0.00037	196
76	6.0	9.99991	284	166	1.5	0.00038	194
78	6.1	9.99992	282	168	1.3	0.00038	192
80	+-6.1-	9.99993	280	170	+-1.1	0.00038	190
82	6.1	9.99995	278	172	0.9	0.00039	188
84	6.2	9.99996	276	174	0.6	0.00039	186
86	6.2	9.99997	274	176	0.4	0.00039	184
88	6.2	9.99999	272	178	0.2	0.00039	182
90	+6.2-	0.00000	270	180	+0.0-	0.00039	180

Bewegung der mittleren Länge L.

Zeit	Mimas	Enceladus Enceladus	Tethys	Dione	Rhea
I	22 0.0	262 43.9	190°41.9	131°32.1	79°41.4
h I	15 55.0	10 56.8	7 56.7	5 28.8	3 19.2
2	31 50.0	21 53.7	15 53.5	10 57.7	6 38.4
3	47 45.0	32 50.5	23 50.2	16 26.5	9 57-7
4	63 40.0	43 47.3	31 47.0	21 55.3	13 16.9
5	79 35.0	54 44.1	39 43.7	27 24.2	16 36.1
6	95 30.0	65 41.0	47 40.5	32 53.0	19 55.3
7	111 25.0	76 37.8	55 37.2	38 21.9	23 14.6
8	127 20.0	87 34.6	63 34.0	43 50.7	26 33.8
9	143 15.0	98 31.5	71 30.7	49 19.5	29 53.0
10	159 10.0	109 28.3	79 27.5	54 48.4	33 12.2
11	175 5.0	120 25.1	87 24.2	60 17.2	36 31.5
12	191 0.0	131 22.0	95 20.9	65 46.0	39 50.7
13	206 55.0	142 18.8	103 17.7	71 14.9	43 9.9
14	222 50.0	153 15.6	111 14.4	76 43.7	46 29.1
15	238 45.0	164 12.4	119 11.2	82 12.6	49 48.4
16	254 40.0	175 9.3	127 7.9	87 41.4	53 7.6
17	270 35.0	186 6.1	135 4.7	93 10.2	56 26.8
18	286 30.0	197 2.9	143 1.4	98 39.1	59 46.0
19	302 25.0	207 59.8	150 58.2	104 7.9	63 5.3
20	318 20.0	218 56.6	158 54.9	109 36.7	66 24.5
21	334 15.0	229 53.4	166 51.7	115 5.6	69 43.7
22	350 10.0	240 50.2	174 48.4	120 34.4	73 2.9
23	6 5.0	251 47.1	182 45.2	126 3.3	76 22.2
ı m	0 15.9	0 10.9	0 7.9	0 5.5	0 3.3
2,	0 31.8	0 21.9	0 15.9	0 11.0	0 6.6
3	0 47.8	0 32.8	0 23.8	0 16.4	0.01
4	1 3.7	0 43.8	0 31.8	0 21.9	0 13.3
5	1 19.6	0 54.7	0 39.7	0 27.4	0 16.6
6	1 35.5	1 5.7	0 47.6	0 32.9	0 19.9
7	1 51.4	I 16.6	0 55.6	0 38.4	0 23.2
8	2 7.4	I 27.6	1 3.5	0 43.8	0 26.6
9	2 23.3	I 38.5	1 11.5	0 49.3	0 29.9
IO	2 39.2	I 49.5	1 19.4	0 54.8	0 33.2
20	5 18.3	3 38.9	2 38.9	1 49.6	ı 6.4
30	7 57.5	5 28.4	3 58.3	2 44.4	1 39.6
40	10 36.7	7 17.9	5 17.8	3 39.2	2 12.8
50	13 15.8	9 7.3	6 37.2	4 34.0	2 46.0
10	0 2.6	о 1,8	0 1.3	0 0.9	0 0.5
20	0 5.3	0 3.6	0 2.6	0 1.8	0 I.I
30	0 7.9	0 5.4	0 3.9	0 2.7	o 1.6
40	0 10.6	○ 7.3	0 5.3	0 3.7	0 2.2
50	0 13.2	0 9.1	0 6.6	0 4.6	0 2.7

Zeit d I	Mimas	Encal			log 1	+ ;		heiten o	,		
1		Encel.	Dione	Rhea	u-U		Encel.	Tethys	Dione	Rhea	u-U
h	21.00	262.4	131.5	79.7	0	6 6	- 7	<u>-9</u>	11	-16 -16	360° 356
I	15.87	10.9	5.5	3.3	4 8	6	—7 —7	-9 -9	-11	-16	352
2	31.75	21.9	0.11	6.6	12	-5	7	-8	11	-15	348
3	47.62	32.8	16.4	10.0	16	-5	-7	-8	-11	-15	344
4	63.50	43.7	21.9	13.3	20	-5	-7	-8	-11	15	340
5	79.37	54.7	27.4	16.6	24	5	-7	8	II	-14	336
6	95.25	65.6	32.9	19.9	28	-5	-7	-8	-10	-14	332
7	111.12	76.5	38.4	23.2	32	-4	-6	— 7	-10	-13	328
8	127.00	87.5	43.8	26.6	36	-4	6	-7	- 9	-13	324
9	142.87	98.4	49.3	29.9	40	-4	6	-7	- 9	-12	320
10	158.75	109.3	54.8	33.2	44	-4	6	_6	8	II	316
11	174.62	120.3	60.3	36.5	48	4	5	6	- 8	10	312
12	190.50	131.2	65.7	39.8	52	-3	-5	5	- 7	-10	308
13	206.37	142.1	71.2	43.2	56	-3	-4	5	- 7	- 9	304
14	222.25	153.1	76.7	46.5	60	-3	-4	-4	- 6	-8	300
15	238.12	164.0	82.2	49.8	64	-3	-3	-4	- 5	7	296
16	254.00	174.9	87.7	53.1	68	2	-3	-3	4	_ 6	292
17	269.87	185.9	93.1	56.5	72	_2	-2	3	- 4	- 5	288
18	285.75	196.8	98.6	59.8	76	I	-2,	-2	- 3	- 4	284
19	301.62	207.7	104.1	63.1	80	1	_I	-2	- 2	- 3	280
20	317.50	218.7	109.6	66.4	84	I	_I	I	- I	- 2	276
21	333.37	229.6	115.1	69.7	88	0	0	0	0	_ I	272
22	349.25	240.5	120.5	73.1	92	0	0	0	0	-+ I	268
23	5.12	251.5	126.0	76.4	96	-j- I	+ I	+1	I	+ 2	264
,	J	-))		/	100	+1	+1	+2	+ 2	+ 3	260
ж I	0.26	0.2	0.1	0.0	104	+I	+2	2	+ 3	+ 4	256
2,	0.53	0.4	0.2	o.I	108	+2	+2	+3	+ 4	+ 5	252
3	0.79	0.5	0.3	0.1	112	+2	+3	+3	+ 4	+ 6	248
4	1.06	0.7	0.4	0.2	116	+3	+3	-1-4	+ 5	+ 7	244
5	1.32	0.9	0.4	0.2	120	+3	+4	+4	+6	+ 8	240
6	1.58	1.1	0.5	0.3	124	+3	+4	+5	+ 7	+ 9	236
7	1.85	1.3	0.6	0.3	128	+3	+5	+5	+ 7	+10	232
8	2.11	1.4	0.7	0.4	132	+4	+5	+6	+ 8	+10	228
9	2.38	1.6	0.8	0.4	136	+4	+6	+6	+ 8	+11	224
IO	2.64	1.8	0.9	0.5	140	+4	+6	+7	+ 9	+12	220
20	5.29	3.6	1.8	1.1	144	+4	+6	+7	+ 9	+13	216
30	7.93	5.4	2.7	1.6	148	+4	+6	+7	+10	+13	
40	10.58	7.3	3.7	2.2	152	+5	+7	+-8	+10	+14	
50	13.22	9.1	4.6	2.7	156	+-5	+7	+8	+11	+14	All .
	, ,)			160	+5	+7	+8	+11	+15	
10	0.04	0.0	0.0	0.0	164	+5	+7	+8	+11	+15	196
20	0.09	0.1	0.0	0.0	168	+5	+7	+8	+II	+15	192
30	0.13	0.1	0.0	0.0	172	+6	+7	+9	+11	+16	
40	0.17	0.1	0.1	0.0	176	+6	+7	+9	+rr	+16	
50	0.22	0.2	0.1	0.0	180	+6	+7	-+-9	+11	16	

TI	Ν.	Δ1	V
1111		Α.	Ν.

O _p			U	U B			P	O _p		U	-	В		P
Jan.	0	201	41.9	23	41.8	2	31.0	Okt.	7	313 53.2	_25	°58.6		°49.6
	2		35.8		41.2		3.3		9	313 51.3		58.4		49.4
	4		30.0	_	40.7		29.6		II	313 49.0		58.2		49.2
	6		24.5		40.3		29.0		13	313 46.2		58.0		48.9
	8	-	19.3		40.0		28.4		15	313 42.9		57.8		48.6
	10		14.6		39.8	-2			17	313 39.1		57.6		48.3
	12	-	10.4		39.6		27.4		19	313 34.9		57.4	1	47.9
	14	291			39.5		27.0		21	313 30.2	_			47.4
	16	291		-	39.6		26.6		23	313 25.0				47.0
	18	291			39.7		26.3		25	313 19.4				46.5
	20		58.3		39.9		26.0		27	313 13.4				45.9
	22		56.4		40.I	2	25.8		29	313 7.0		56.6		45.3
	24		55.0	_	40.5		25.7		31	313 0.2		56.4		44.7
	26		54.1		40.9		25.7	Nov.	2	312 53.0		56.3		44.0
	28		53.7		41.4		25.6		4	312 45.4		56.1		43.3
	30	-	53.7	1	42.0		25.6		6	312 37.4		56.0		42.5
Febr.	1		54.3	1	42.7		25.7		8	312 29.1	_	55.8		41.8
	3		55.3		43.5		25.8		10	312 20.5		55.6		41.0
	5		56.9	i	44.3		26.0		12	312 11.5	25	55.4		40.2
	7		58.9		45.2		26.2		14	312 2.2	25		-4	
	9	291	-		46.1	-2			16	311 52.7		55.1	4	38.4
	11	291	4.5		47.1	2	- 0		18	311 42.9		54.9	4	37.5
	13	291	8.0		48.2	2	27.2		20	311 32.9		54.7		
	15	-	11.9		49.4	2	27.7		22	311 22.7		54.6		-
	17	-	16.3		50.6		28.2		24	311 12.3		54.4		-
	19		21.2	-23	-	-2	28.8		26	311 1.8		54.2	4	33.6
	21	-	26.5		53.4	2	29.4		28	310 51.1		54.0	4	32.6
	23		32.3		54.9		30.1		30	310 40.3	25	53.9		31.6
	25		38.5	23			30.8	Dez.	2,	310 29.4	25		4	30.5
	27	-	45.1	23	58.1	2	31.6		4	310 18.5	25	53.5	4	29.5
März	I	-	52.2	_	59.8	2	32.4		6	310 7.5	-25	53.3	4	-
	3		59.7	24	1.6	2	33.2		8	309 56.5	25			27.5
	5	292	7.7	24	3.4	2	34.1		10	309 45.5	25	53.0		26.4
	7	-	16.1	24	5.3	2	35.0		12	309 34.6	25	52.9		25.4
	9	-	24.8	24	7.2	2	36.0		14	309 23.7	25	52.7		24.3
	ΙΊ	-	33.9	-24	9.2	2	37.0		16	309 12.9	-25	52.6		23.3
	13	-	43.5		11.2	2	38.1		18	309 2.2	25	52.4		22.3
	15		53.4		13.2	2	39.2		20	308 51.6		52.3		21.3
			3.7	24	15.3		40.4			308 41.2	25	52.1	4	20.3
			14.3	24	17.4	2			24	308 31.0	25	52.0	-4	
				-24					26	308 21.1	-25	51.8	4	18.3
			36.6		21.8				28	308 11.4	25	51.7	4	17.3
	- 1			-24					30	308 1.9	25	51.6	4	16.4
	11	,,					, ,			307 52.7				
									5	1111				

TITAN.

TITAN.											
O ^h	$\alpha_{tr} - \alpha_{pl}$	δ_{tr} — δ_{pl}	O _p	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{f^l}$						
Jan. o	- -11.18 #	+56.9 +17.5	Febr. 11	+ 0.71	-77.0 + o.r						
J.	684 4.34	1 -/-3	12	- 562 4.91	E 1						
2	-5.40	. 0.0	13	1 0 72	10.2						
3	- 416 -5.00	7.0	14	1 72 41	-30 12 1-3.3						
4	- 0.06 -4.90	19.1	15	10.9/	1 7 7						
5	-T2.42 -3·3/	1262	16	+13.41 -0.95 +12.46 -2.78	1000						
6	T2 7T	34.4	17	1 0.68	1 -6 - 1 -3.0						
7	-12.72 +0.99 +3.02	$\begin{bmatrix} -6.1 \\ -37.3 \\ -25.1 \end{bmatrix}$	18	+5.46 -5.04	+50.2 + 14.4 + 70.6 + 3.5						
8	- 0.70	-62.4 -15.4	19	+ 0.42 -5.09	174 T ' 3'3						
9	-5.17 + 4.53 + 5.31	$-77.8 ^{-15.4}$	20	-4.67	+65.8 - 19.2						
10	+ 0.14 +5.26	-81.4 + 8.3	21	$-8.97^{}_{2.80}$	+46.6 -26.9						
11	+ 5.40 +4.46	-73.1 + 8.3 +19.0	22	-11.77 -0.84	+19.7 -20.4						
12	+ 9.86 +3.07	-54.1 + 26.1	23	-12.61 + 1.22	-10.4						
13	+12.93 +1.24	-28.0 +20.1 +30.2	24	-11.39 +2.02	-38.7 -20.3 -22.1						
14	+14.17 -0.79	$+2.2^{+30.2}_{+29.8}$	25	= 8.36 +4.30	-60.8 -12.7						
15	+13.38	+32.0 +25.1	26	- 4.06	-73·5 - 1·7						
16	+10.02	+57.1 + 16.3	27	+ 0.83 +4.75	-75.2 + 9.1						
17	+ 0.27 -5.20	+73.4 + 48	28	+ 5.58 +3.95	-00.1 +18.5						
18	+ 0.98	+78.2	März 1	+ 9.53 +2.61	-47.0 +arr						
19	-4.40	+70.5 -19.3	2	+12.14 +0.90	-22.5 +28.3						
20	- 9.14 _{-3.14}	$+51.2_{-27.8}$	3	+13.04 -0.97	+ 5.8 +27.2						
21	-12.28	+23.4	4	+12.07 -2.71	+33.1 +22.5						
22	-13.36	- 8.I	5	+ 9.30 -4.10	+55.0 +14.0						
23	—12 .2 4 _{3.07}	-38.2	6	+ 5.26 -4.94	+09.0 + 2.1						
24	$-9.17_{+4.47}$	-02.I	7	+ 0.32 -4.95	+72.7 - 8.5						
25	- 4.70 18	$-76.4_{-2.9}$	8	- 4.03 - 1.16	+04.2 -10.0						
26	+ 0.48	-79.3 + 8.8	9	- 8.79 -2.70	+45.2 -26.5						
27	+ 5.58 +4.27	$-70.5_{+18.9}$	10	-11.49 -0.79	+18.7 -29.5						
28	+ 9.85 +2.87	-51.6 $+26.1$	11	-12.28 +1.20	-10.6						
29	+12.72 +1.07	$-25.5_{+29.5}$	12	-11.08 +2.95	-38.5 -21.6						
30	+13.79 -0.90	+ 4.0 +28.8	13	- 8.13 +4.19	_60,112.3						
Febr. 1	+12.89 -2.78	+32.8 +-24.0	14	- 3.94 +4.76	-72.4 - 1.5						
	+10.11	+56.8 +15.3	15	+ 0.82 +4.63	-73.9 + 9.0						
2	+ 5.82 -5.18	+72.1 + 4.1	16	+ 5.45 +3.85	-04.9 +18.2						
3	+ 0.64 -5.27	+76.2 - 8.2	17	+ 9.30 +2.54	-46.6 +24.8						
4	-4.63 -4.47	+68.0 -19.4	18	+11.84 +0.88	-21.8 +27.7						
5 6	- 9.10 -2.91	+48.6 -27.3	19	+12.72 -0.93	+ 5.9 +26.9						
7	-12.01 -12.08 -0.97	$+21.3 \begin{array}{c} -27.3 \\ -30.8 \end{array}$	20	+11.79 -2.66	+32.8 +22.1						
8	-12.98 + 1.19 -11.79 + 2.07	4.5	21	+ 9.13 -4.02	+54.9 +13.8 +68.7 + 2.0						
9	8 70	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	23	+ 5.11 -4.79	. H- H						
10	1.00	-01.5 -13.4	24	+ 0.32 -4.83							
11	$\begin{array}{c} -4.32 \\ +0.71 \end{array}$	-74.9 -77.0	25	$\begin{array}{c c} - 4.51 & -4.08 \\ - 8.59 & -4.08 \end{array}$	+03.2 -18.9 +44.3						
**	J./1	//.0	45	0.39	1.44.3						

TITAN.

o _p	$a_{tr} - a_{pl}$	$\delta_{tr} - \delta_{pl}$	O _p	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$
Okt. 7	- 9.9I _{+4.44}	71.2 <u>"</u>	Nov. 19	5.97 - 1.82	+75.2 26.2
8	F 4E 14'44	-71.2 -15.1 $-86.3 -2.5$	20		
	- 5.47 +5.25	00.3 - 2.5		10.79 -3.02	+48.9 =34.4
9	-0.22 + 5.31	-88.8 +10.1	2.1	13.81 0.73	+14.5 - 36.9
10	+ 5.09 +4.60	$-78.7_{+21.4}$	22	-14.54 _{-1.6} ,	-22.4
11	+ 9.09	$-57.3_{+29.6}$	23	—12.93 _{+3.63}	-55.0
12	+12.94 +1.41	-27.7	2.4	- 9·30 +5·04	$-80.5 \begin{array}{c} -24.7 \\ -12.5 \end{array}$
13	+14.35 -0.69	U.U Lan 8	25	- 4.26 +5.68	-93.0 + 1.1
14	T2 DD	+38.8	26	± T 42	_010
15	-L1001	1600	27	6.00	_776 114.3
16	± 6.45 4.40	1820	28	1 77 40	F2 2 1 23·3
17	3.3.	±86 c	29	1 1420	_ TO C
18				14.29 +0.8 ₂	-19.5 +35.6
	- 4.74 _{-4.91}	+75.9 -23.4	30	+15.11 -1.41	+16.1 +33.3
19	$-9.65_{-3.30}$	$+52.5_{-32.2}$	Dez. 1	+13.70 -3.49	+49.4 +25.7
20	-12.95	+20.3	2	+10.21 -5.10	+75·1
2.1	-14.12	-15.4	3	+ 5.11	+09.0
22	13.0I	$-48.6 \begin{array}{l} -33.2 \\ -25.8 \end{array}$	4	-0.81 $\frac{3.92}{5.78}$	1886
23		711 1	5	$-6.59_{-4.68}^{-5.76}$	-15.2 -1-73.4
24	7 72	-80 T	6	TTOF	1460 2/14
25	1 3.43	00 =	7	7.4.05	-L-TO 8 3312
2 6	-1- 562 +5.42	70.2	8	T 1 C T	-26.2 -37.0
		-79·3 +22.8		-14.51 +1.88	-034./
27	+10.27 +3.19	$-56.5_{+30.8}$	9	-12.63 +3.85	-58.9 -23.6
28	+13.40 +1.27	-25.7 +34.5	10	- 8.78 +5.17	-02.5 -II.I
2 9	+14.73 -0.80	+ 0.0	11	$=3.51_{+5.71}$	-93.6 $+ 2.6$
30	+13.84	+42.2	12	2.10 +5.40	-91.0 +15.6
31	+10.05 -460		13	+ 7.50 +4.34	$-75.4_{+26.4}$
Nov. 1	+- 6.16 -5.69	+85.0	14	TT 34	10.0
2		88 T	15	-F2.05	157 1333
3	5 22 3./9	12.1	16	-LIE OF	1 TO 8 1 3313
	TO 23	1 = 7 4	17	-1-T2 28 1.0/	1 50 1
4		1 7 5 93.0	18		+52.4 +24.5
5	13.41 0.98	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		9.68 	-1-76.9 +12.5
6	-14.39 +1.34		19	+ 4.44 -5.94	+89.4
7	-13.05 $+2.28$	$-52.2_{-25.4}$	20	- 1.50 - 5.67	+87.3 -16.6
8	- 9.07 -1.86	-77.6 -13.8	21	7.17 -4.46	+70.7 -28.4
9	- 4.81 +5.58	-91.4 - 0.4	22	-11.63 -2.51	+42.3
10		OT X	23	TA TA	1 6 2 33.4
11	-1- 625 13.40	70.0	24	T 4 22	30.5
12	+10.86	1 24.1	25	12.10	67.1
13	+13.92 +13.92 +1.07	-54.9 + 31.9	26	-12.19 $+4.02$	-82.6
		-23.0 +35.3	1	$\begin{array}{c} -8.17 \\ +5.24 \\ -2.03 \end{array}$	-83.6 -9.5
14	-14.99 _TT2	T12.3 +33.5	27 28		95.1
15	+13.86 -3.25	+45.8 +26.6	1	4./3 +5.27	-80.1 +16.8
16	-10.01	+72.4 +15.3	29	+4.13	$-72.3_{+27.0}$
17	+ 5.70 -5.85	+87.7 + 1.1	30	+12.13 +2.30	-45.3 + 22.4
18	0.15 5.82	+88.8	31	14.52	-11.9 ± 25.0
19	5.97	+75.2	32	-14.82	+23.1

HYPERION.

O _p		U		U B P		O ^h		U		В		P			
Jan.	0	287	3.4	23	31.4	_I	°53.2	Okt.	7	309	6.2	- 26	° 3.0	-4	9.5
	2	286	57.1		30.8		52.5	1	9	309		26	2.7	4	9.3
	4		51.2		30.2		51.9	. 11	ΙI	309		26	2.5	4	9.1
	6		45.7		29.7		51.3		13	308		26	2.3	4	8.8
	8		40.6		29.3		50.7		15	308		26	2.1	4	8.5
	10		35.9		29.0		50.1		17	308		-26	1.9	-4	8.2
	12		31.7		28.7		49.7		19		47.6	26	1.7	4	7.8
	14		27.9		28.5	1			21	308	42.8	26	1.5	4	7.3
	16	286	24.6	23	28.5	1	49.0		23		37.6	26	1.3	4	6.8
	18		21.7	23	28.6	I	48.7		25	308	32.0	26	1.1	4	6.3
	20	286	19.3	23	28.7	1	48.4		27	308	25.9	-26	0.8	4	5.7
	22	286	17.4	23	28.9	1	48.2		29	308	19.4	26	0.5	4	5.1
:	24	286	16.0	23	29.2	I	48.I		31		12.5	26	0.3	4	4.5
:	26	286	15.1	23	29.6	1	48.0	Nov.	2	308	5.2	26	0.0	4	3.8
:	28		14.6	23	30.1		48.0		4	307	57.6	25	59.8	4	3.1
	30		14.7	23	30.7	I	48.0		6		49.6	25	59.6	4	2.4
Febr.	1	2 86	15.2	23	31.4	I	48.0		8	307	41.3	25	59.4	4	1.6
	3	286	16.2	23	32.2	I	48.I		10	307	32.6	25	59.2	4	0.8
	5	286	17.7	23	33.I	Ţ	48.3		12	307	23.6	25	58.9	4	0.0
	7		19.7	23	34.1	J	48.5		14	307	14.3	25	58.6	3	59.1
	9		22.T	23	35.1	I	48.8		16	307	4.8	25		-3	58.2
1	II		25.0	23	36.3	1	49.I		18	306	55.0	25	58.1	3	57.3
1	13	286	28.4	2 3	37.5	I	49.5		20	306	44.9		57.8	3	56.3
1	15		32.3	23	38.8	1	49.9		22	306	34.6	25	57.6	3	55.4
3	17		36.6	23	40.2	1	50.4		24	306	24.2	25	57-3	3	54.4
3	19		41.4	-23	41.7	—I	50.9		26	306	13.6	25	57.0	-3	53.4
2	2.1		46.7	23	43.2	1	51.5		28	306	2.9	25	56.7	3	52.4
2	23		52.4		44.8	I	52.2		30	305	52.0		56.4	3	51.4
2	25	286	58.5	23	46.4	1	52.9	Dez.	2	305	4I.I	25	56.1	3	50.3
_ 2	27	287	5.1	23	48.1	I	53.6		4	305	30.1	25	55.8	3	49.3
Vlärz	1		12.1	23	49.9	1	54.4		6	305	19.1	-25	55.5	-3	48.2
	3		19.5	23	51.7	I	55.2		8	305	8.1	25	55.3		47.2
	5		27.4	23	53.6	1	56.1		10	304	57.0	25	55.0	3	46.1
	7		35.7	23	55.5		57.0		12	304	46.0	25	54.7	3	45.0
	9		44.4	23	57.5	I	58.0		14	304	35.1	25	54.4	3	44.0
I	I	287	53.5	-23	59.5	-1	59.0		16	304	24.3	-25	54.2	-3	42.9
I	3	288	3.0	24	1.6	2,	0.0		18	304	13.6	25	53.9		41.9
I	-		12.9	24	3.7	2	1.1		20	304	3.0	25	53.7		40.9
			23.1		5.9	2	2.3		22	303	52.6	25	53.4	3	39.9
	9	288	33.7	24	8.1	2	3.5		24		42.4		53.1	3	38.9
				-24		2	4.7		26	303	32.3	-25		-3	
	3	288	55.8	24	12.7	2	5.9		28		22.5		52.7		36.9
2	5	289	7.4	-24	15.T	2	7.2		30	303	12.9		52.6		3 6.0
									32	202	06	25		-3	

HYPERION.

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\delta_{tr} - \delta_{pt}$ + $89.4^{"}_{2.6} - 2.6$	o ^h Febr. 11	$\frac{\alpha_{tr} - \alpha_{pl}}{}$	$\delta_{tr} - \delta_{pl}$
$-3.80^{-3.50}$		Echu zz		
$-3.80^{-3.50}$		r cor. 11	+ 4.46	+80.6
_ 8 87 -5.0/	XO X	12	- 050	. 0 - 0 1 3 **
/0	-12.0	13	- 5.57	+77.7
-T2 OF -4-10	+ 55 2 19.3	14	- 0.07	+62 6 -14.1
16.02	1 400	15	70.40	$+43.5 \begin{array}{c} -20.1 \\ -24.0 \end{array}$
	+ 20	16	-15.64 -0.00	+19.5 - 25.9
-17.89	- 222	17	-10.03	-6.0^{-25}
-10.80 $+2.18$	$-48.7_{-22.0}$	18	-16.39	$-30.8 \begin{array}{c} -22.0 \\ -22.0 \end{array}$
T / DX	-70.7	19	-15.00 +2.30	-53·4 -19·
	- 88.0 -11.6	20		-/2.5
H h A	00.6	21		$-86.7 \frac{-14}{-8}$
	-104.6	22	F D2	-95.2_{-2}
+ 1.30 +4.46	TO2 b	23	- I.40 _{+4.24}	-97.5 + 4
	02.4	24		<u>-93.0</u>
- O 78	in the A	25	+ 0.80	-01.9
		26	+10.29 +2.65	-64.6 + 17
	28.4	27	+12.94	-41.4 + 26.
		28	±14.07	1 −15.0 _{±27.}
-L-T4 72		März 1	+T4 25	+12.6 + 26.
1.70.70		2		+39.0 +22.
	1 77 7 1 19-1	3		+61.0 +14.
	0	4		+75.8 + 6.
- 2.20 -5.31	1 0 - 6	5		+81.8 - 3
-7.25	1 76 5	6	- 3.87	1 7 /0. /
-11.50		7	0.30 _2.62	
TA PP 3.21	1 27 2	8	TT 00	+49.4
16.71	-3.3	9	T1 50	+27.2
-17.32 +0 6r	110	10	- T. 88	+ 2.8 -24
		II	TO OD	-21.7 -23
T 4 8 FF	02.2 - 18 T	12		-44·7 -19
-12.08	80.2	13		-04.0
	000	14	-10.292.40	-80.2
4 45	-TOO.O _ O.T	15		-90.5 ₋₄
- 0.08 14.37	TOO T	16	- 2 AA	$-94.9 + \frac{4}{2}$
		17	_L T 22	—92.8 , ₀
Q 2 1 4.04	707	18		-04.1
1 3.30	6 119.1	19	1 000 13:39	-69.0 +15 +20
1 74 56 12.30		20	L TT 20	-48.3 +25.
71.04	2010	21	11.01	-23.3
1 T4 6T	1 21 0	22	10.49	$+3.9_{+26}$
_LT2 52	+ 47.5 +20.6	23	+13.03	+30.6 +23
- 0.03	+ 68.1	24		+53.9 +17.
+ 4.46	+ 80.6	25	+ 6.95	+70.9
	-17.64 -0.25 -17.89 -16.86 -14.68 -14.68 -14.68 -13.5 -16.86 -14.68 -14.68 -11.53 -3.27 -4.57 -4.57 -4.02 -4.02 -4.02 -4.02 -4.03 -4.04 -3.11 -2.20 -5.05 -11.56 -3.21 -4.05 -4.05 -4.05 -4.05 -4.05 -4.05 -4.05 -4.05 -4.05 -4.05 -4.08 -4.45 -4.37 -0.08 -4.45 -4.38 -4.39 -4.40 -4.40 -4.40 -4.40 -4.40 -4.40 -4.40 -4.40 -4.40 -4.40 -4.40 -4.40 -4.50 -4.50 -4.56 -4.56	-17.64	-17.64	-17.64

HYPERION.

O ^h	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pt}$	O _p	$a_{tr} - a_{pl}$	δ_{tr} — δ_{pl}				
Okt. 7	-13.15 _{-2.00}	+ 61.1 -25.5	Nov. 19	-16.29 -8 -2.25	+ 46.3				
8	T6 TF 3.00	1 25 6 -25.5	20	-0 2.23					
9	TE 05	1 10 10	21	70 45	70.4				
10	-0 0.34	2019	22	10.42	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				
II	TH HG 10./3	40.0	23	11./1	$-69.5^{-26.7}_{-22.0}$				
12	_ 15 82 1-1.94	70.0	24						
13	T2 80	19.3	25	1-3.90	15.0				
14	- 8 80 +3.91	TOT 4	26	14.04	1750				
15	1.22 14.3/	7.70 8 3.4	27	080					
16	-1- 0.60	-TOT 5 T 3.3	28	1 405	10.0				
17	7-4-69	-95.4 + 12.1	29	1 0 14	850 119.3				
18	0.80	- 74 8	30	3.90	= 578				
19	T2 24 '3'43	-46.8 $+28.0$	Dez. 1	1 TE 61	218 133				
20	+13.34 +2.07	-13.6 +33.2	2	+16.47	- 24.8 + 11.0 + 25.8				
21	+15.41 +0.36			1	1 45 6 734.0				
22	+15.77 -1.46	+ 20.9 +32.2	3	+15.45 -2.83	+ 45.6 +34.6				
	+14.31 -3.12	+ 53.1 +26.2	4	+12.62 -4.29	+ 74.8 +20.7				
23	+11.19 + 6.78	+ 79.3 +17.3	5 6	-5.21	+ 95.5 +10.3				
24		+ 96.6 + 7.0		+ 3.12 -5.54	+105.8 - 0.6				
25	+ 1.62 -5.35	+103.6 - 3.4	7 8	-2.42 -5.32	+105.2				
26	- 3.73 _{-5.03}	100.2		- 7·74 -4.64	+ 94.5 -19.0				
27	$-8.76 \begin{array}{r} -5.03 \\ -4.28 \end{array}$	$+87.4_{-20.4}^{-12.6}$	9	-12.38 _{-3.63}	+ 75.5 -25.1				
28	-13.04 -3.26	+ 67.0 -25.6	10	-16.0I -2.4I	+ 50.4 -28.9				
29	$-16.30 \begin{array}{r} -3.20 \\ -2.05 \end{array}$	+ 41.4 -28.9	11	$-18.42 \begin{array}{c} -2.41 \\ -1.08 \end{array}$	+ 21.5				
30	-18.35 -0.75	+ 12.5 -29.9	12	-19.50 +0.26	$-8.9_{-29.8}$				
Nov. 1	-19.10 +0.57	- 17.4 -28.7	13	-19.24 +1.57	- 38.7 -27.2				
	-18.53 +1.8 ₂	$-46.1_{-25.6}$	14	$-17.67_{+2.76}$	- 05.9 -22.6				
2,	-16.71 + 2.97	$-71.7_{-20.9}$	15	14.91 +3.78	- 88.5 -16.4				
3	-13.74 + 3.92	- 9 2. 6	16	-11.13 +4.57	—104·9 — 9.0				
4	9.82 +4.65	-107.0 - 6.7	17	- 0.50 +5.04	-113.9 - 0.7				
5	5.17 +5.05	-113.7 + 2.1	18	1.52 +5.16	-114.0 +- 8.5				
6		-III.6 +II.2	19	+ 3.64 +4.84	10011				
7	+4.63	-100.4 _{+20.0}	20	-1- 8.48	- 00.4				
8	+9.57 + 3.72	-80.4 +27.7	21	+12.51 +2.76					
9	- -13.29 +2.34	$=52.7_{+23.3}$	22	+15.27 +1.11	J-17 1-25 4				
10	+15.030.61	19.4 +25 6	23	16.38 -0.76	+24.8				
11	16.24 -1.24	+ 10.2 +-22.6	24	+15.62 -2.58	+ 39.8 +30.0				
12	- -I5.00 -3.∞	+ 49.0 +27.8	25	T2.OA	0Q.ō .				
13	+12.00 -4.40	+ 77.0	26	+ 0.97	74.7				
14	-5.22	+ 90.8 + 8.8	4/	7 3.90 -5.48	+103.8 + 1.0				
15	+ 2.38	+105.6 - 2.0	28	1.50 -5.22	+103.8 + 1.0 +104.8 - 9.0				
16	- 3.10 -5.21	+103.0 -11.8	29	- 0.90	T 43.0				
17	- 8.31	+ 91.0 -19.9	30	-11.00	+ 70.2 -22.0				
18	-12.81	$+71.9_{-25.6}$	31	-15.35 -2.56	+ 54.3 -28.0				
19	-16.29 3 ¹⁴	-+ 46.3	32	-17.91	+ 26.3				

O ^h		U	В	P	Oh	U	В	P
Jan.	0	8°51.8	-15 57.4	-14° 54.2	Okt. 7	29° 47.0	-14° 29.7	13°22.2
	2	8 45.8	15 58.1	14 54.4	9	1	14 29.8	13 22.4
	4	8 40.1	15 58.8	14 54.6	ıı	29 43.1	14 29.9	13 22.7
	6	8 34.9	15 59.5	14 54.8	13	29 40.5	14 30.1	13 23.0
	8	8 30.r	16 0.1	14 54.9	15	29 37.4	14 30.3	13 23.4
I	0	8 25.7	—16 o.8	14 55.1	17	29 33.9	—14 30.6	-13 23.8
1	2	8 21.8	16 1.5	14 55.2	19	29 29.9	14 31.0	13 24.3
	4	8 18.3	16 2.2	14 55.3	21	29 25.5	14 31.5	13 24.8
	6	8 15.3	16 2.8	14 55.4	23	29 20.8	14 32.0	13 25.4
	8	8 12.8	16 3.5	14 55.5	25	29 15.6	14 32.6	13 26.0
	0,	8 10.6	-16 4.I	14 55.6	27	29 10.0	— 14 3 3 .2	-13 26.7
	.2.	8 8,9	16 4.8	14 55.7	29	29 4.0	14 33.9	13 27.4
	4	8 7.7	16 5.4	14 55.8	No. 31	28 57.7	14 34.7	13 28.2
	6	8 7.0	16 6.0	14 55.9	Nov. 2	28 51.0	14 35.5	13 29.0
	8	8 6.7	16 6.6	14 56.0	4	28 43.9	14 36.4	13 29.9
T1 1	O I	8 6.9 8 7.6	-16 7.2 16 7.8	-14 56.0	6 8	28 36.5	-14 37·3	-13 30.8
r cor.		8 7.6 8 8.8	16 7.8 16 8.4	14 56.0		28 28.9 28 21.0	14 38.3	13 31.7
	3	8 10.4	16 8.9	14 56.1 14 56.1	10 12	28 12.7	14 39.3 14 40.4	13 32.7 13 33.7
	5	8 12.5	16 9.4	14 56.1	14		14 41.5	13 34.7
	9	8 15.0	16 9.9	—14 56.1	16	27 55.4	—14 42.6	-13 35.8
	II	8 18.0	16 10.3	14 56.1	18	2 7 46.4	14 43.8	13 36.9
	13	8 21.5	16 10.7	14 56.1	20	27 37.1	14 45.0	13 38.0
	5	8 25.4	16 11.1	14 56.1	22	27 27.7	τ4 46.3	13 39.1
	7	8 29.8	16 11.5	14 56.0	24		14 47.6	13 40.3
	9	8 34.6	-16 11.8	-14 56.0	26	27 8.4	14 48.9	-13 41.4
	I	8 39.9	16 12.1	14 55.9	28	26 58.5	14 50.3	13 42.6
2	13	8 45.6	16 12.4	14 55.8	30	26 48.5	14 51.7	13 43.7
	5	8 51.8	16 12.7	14 55.7	Dez. 2	26 38.5	14 53.1	13 44.9
2	7	8 58.4	16 13.0	14 55.6	4	26 28.4	14 54.5	13 46.0
März	I	9 5.3	16 13.2	-14 55.5	6	26 18.3	-14 56.0	-13 47.2
	3	9 12.7	16 13.4	14 55.4	8	26 8.1	14 57.4	13 48.3
	5	9 20.5	16 13.6	14 55.2	10	25 58.0	14 58.9	13 49.4
	7	9 28.7	16 13.7	14 55.0	12	2 5 47.9	15 0.4	13 50.5
	9	9 37.2	16 13.9	14 54.8	14	25 37.8	15 1.8	13 51.6
	1	9 46.1	16 14.0	-1454.6	16	25 27.8	-15 3.3	-1352.7
	3	9 55.4	16 14.1	14 54.4	18	25 18.0	15 4.7	13 53.7
	5	10 5.0	16 14.1	14 54.2	20		15 6.1	13 54.8
	7	10 15.0		14 54.0	22	24 58.7	15 7.5	13 55.8
	9		16 14.2			24 49.3		
	I	10 30.0	-16 I4.2	T4 53.4			-15 10.3	
	3	10 46.9	—16 14.1 —16 14.1	14 53.1	28	24 31.3	15 11.6 15 12.9	13 58.8
2	5	10 58.2	-10 14.1	-14 52.8				
					32	24 14.2	—15 1 4.1	-14 0.7

			VIII L	1100.		
0	b	$\alpha_{tr} - \alpha_{pl}$	õ _{tr} — õ _p t	O _p	$a_{tr} - a_{pl}$	$\delta_{tr} - \delta_{pl}$
Jan.	0	-24.60 ±2.62	211.9	Febr. 11	+19.47	+208.1
o an.	I	22.06	2100	12	+T6.00 2.3/	- 3.0
	2	-19.28 + 2.78	208 4 7 5		+14.24 -2.66	+199.8 - 4.7
		-16.37 $+2.91$	2016 7 3.0	13	/3	1 7000
	3 .		-204.6 + 5.3	14	+11.51 -2.78 + 8.73 -2.82	1 -06 -
	4	-13.36 +3.09	-199.3 + 6.6	15		-180.9 - 8.0
	5	-10.27 +3.15	-192.7 + 79	16	$+5.91_{-2.85}$	+178.9 - 9.0
	6	- 7.12 +3.19	-104.0 + 0.2	17	+ 3.06 -2.86	+109.9
	7	- 3.93 _{+3.20}	-175.0 +10.0	18	+ 0.20 -2.84	+159.9
	8	$-0.73_{+3.20}$	-165.3 + 11.4	19	- 2.64	+149.0 -11.7
	9	+ 2.4/ +2.17	-153.9 +12.4	20	- 5.46	+137.3 -12.5
	10	+ 5.04	-141.5 -12.2	21	- 8.24 _{-2.77}	+124.0
	11	+ 8.70	-120.2	22	-10.95 _{-2.64}	+111.6 -13.8
	12	+11.81 +2.96	-114.2 + 14.7	23	-13.59 -254	97.8
	13	+14.77 +2.86	- 99.5 +15.4	24	-10.13	
	14	1 77 60	Q . T 1 23.4	25	-18.57 $^{-2.44}$	± 68.6
	15	-1-20.26 1 /3	68 2	26	-20.88	+53.5
	16	1 00 06 72.00	- 520	27	22.06	1 28 T
	17		25 5 1 1013	28	25.00	1 22 5
	18	+27.68	18.8	März 1	26.05	60 -15.0
	19	-1-20.78	2.7	2	28.64	- 87
	20	-LOT 68 TIGO	T16 710.7	3	-1.50	240
	21	71.09	10.0		-1.30	= 39.6 $= 15.3$
	22	+33.37 +1.49 -+34.86 +1.49	110.4	4	-22 54	
				5 6	-32.54 -0.89	
	23	+36.13 +1.05	+ 63.6 +15.5		-33·43 _{-0.67}	- 69.2 -14.0
	24	+37.18 +0.83	+ 79.1 +15.0	7	-34·10 -0·45	-83.2 -13.5
	25	+38.01 +0.60	+ 94.1	8	-34.55	90.7
	2 6	+38.61 +0.37	+100.0	9	-34·77 o.oo	-109.5
	27	+38.98		10	- 34·77 +o.23	-121.5 -11.3
	28	+39.11	+135.3 +12.1	II	34.54 +0.46	132.8
	29	+39.01	+147.4	12	-34.08	-143.1
	30	+38.09 -055	+158.6	13	-33.41	152.4 _ 82
	31	-1-30.14 -0.76	+168.9 + 0.3	14	-32.52	-100.7
\mathbf{Feb}_{1}	ľ. I	-1-37.38	+170.2 + 8.2	15	-31.42 + 1.30	
	2	-+36.40 -1.19	+186.5 + 7.1	16	-30.12	1"//1.()
	3	+35.21 -1.28	TO 2 / 2	17	-28.62	-178.9 -4.9
	4	L20 80 1.30	1 700 6	18	71.00	-182.7
	5	+32.26	+201.4	19	25.CQ	-185.2
	6	+30.51	+208.0	20	-23.08 + 2.01	-186.5
	7	+28.59 -2.08	+210.5 + 1.2	2.1	-20.03	-186.5 + 1.2
	8	+26.51 -2.22	+211.7	22	-20.93 + 2.28 -18.65 + 2.28	-185.3 + 1.2 + 2.3
	9	1.04.00	1 277 7	23	.6 06 1 37	0 13
	10	2-33	1.2		72.49	
		+21.94 - 2.47 + 19.47	+210.5 - 2.4	24	-13.77 -11.20 $+2.57$	-179.5 + 4.7
	11	T19.47	7-200.1	25	-11.20	-174.8

JAPETUS.											
O _p	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	O ^h	$a_{tr} - a_{pl}$	$\delta_{tr} - \delta_{pl}$						
Okt. 7	1.02.70	IO2 0 "	Nov. 19	-21.75 +2.07	200 I "						
Okt. 7	+32.70	1 192.9 + 2.0		-21./5 +2.97	200.I + "						
	+30.77	+195.8 + 1.8	20	-18.78 + 3.09	-197.6 + 3.9						
9	+28.64	+197.6 + 0.7	21	-15.69 +3.21	-193.7 + 5.3						
10	+20.33	+198.3 - 0.6	22	12.48 +3.30	-100.4 + 6.6						
II	-1-23.00 -2.62	-197·7 - 1.8	23	9.10	-181.8 + 7.8						
12	+21.23	+195.9 - 2.9	24	- 5.01 +2.41	-174.0 + 9.0						
13	+10.40	+193.0 - 4.1	25	- 2.40	-105.0 +10.1						
14	+15.57		26	+ 1.02	-154.9 +11.2						
15	+12.58	+103.0 - 6.4	27	+ 4.44 +2.40	-143.7						
16	+ 9.50	-177.2 - 7.6	28	+ 7.04 +2.25	-131.0 +12 T						
17	+ 0.35	109.0 - 87	29	+11.19 +3.27	- 128.5 +13.9						
18	$+ 3.15 \frac{3.13}{-3.24}$	+100.9 = 0.6	30	+14.46 +3.19	-104.6						
19	0.09 -3.25	+151.3 -10.6	Dez. 1	-H17.65 +3.07	- 90.0 +15.2						
20	$-3.34_{-3.23}$	+140.7 -11.6	2	+-20.72 +2.94	- 74.8						
21	6 57 3.23	T20 T	3	1 22 66	50 T + 13./						
22	0 77	LTT6 6	4	1 26 45 12./9	420						
23	70.00	-LTO2 4	5	1 00 05	266						
24	TC 00	80.4	6	107.57	7-10.7						
25	T8 0H 2.90	1 748	7	1 2 2 1 1 1	68 110.7						
2 6	2 - 0	1 "06	8	1 05 50	+10.7						
27	21.75	140	9	1 07 60	1 40 T						
28	25 12 2.3/	1 280	.10	1 00 70	1 -6 4 110.3						
29	20.50	1 778	11	-I-40 FT	1 72 4						
30	-29.52 -31.72 -1.08	10.3	12	1-17 60	. 00 - 115.0						
31		20.0		1 42 42	7-15-1						
Nov. 1	-33.70 -1.76	$\frac{-20.9}{-37.2}$	13	+42.43 +0.58	+103.1 +14.5						
2	-35.46 -36.98 -1.52	50 C 16.1	14	+43.01 +0.31	+117.6 +13.8						
		$-53.3_{-15.8}$	15	+43.32 +0.06	+131.4 +13.1						
3	-38.24 -1.∞	$-\frac{69.1}{-84.4}$	16	-43.38 -0.21	+144.5 +12.2						
4	-39·24 -0·73	14.8	17	+43.17 -0.48	+150.7						
5	$-39.97_{-0.45}$	- 99.2 _{-14.2}	18	+42.69	+167.9 +10.2						
6	-40.42	-113.4	19	+41.90	+178.1						
7	-40.58	-120.8	20	+40.98	+187.3 + 8.1						
8	-40.46	139.3	2,1	+39.75	+195.4 + 68						
9	-40.05 +0.60	-150.9 -10.6	22	+38.28	+202.2 + 5.6						
10	-39.36	-161.5 - 0.4	23	+30.58	+207.8 + 4.4						
11	-36.39 + 1.24	-170.9 - 8.2	24	7-34.00 -2.12	+214.4 + 2 x						
12	-37.15	-179.2	25	+32.54 -2.32	+215.3 + 1.8						
13	-35.64	-186.3 - 5.7	26	+30.22	+217.1 + 0.5						
14	-33.88 +2.01	192.0	27	$+27.72 \begin{array}{c} -2.50 \\ -2.66 \end{array}$	+217.6 - 0.8						
15	-31.87 + 2.23	$-196.4 = \frac{4.4}{3.0}$	28	$+25.06 \begin{array}{l} -2.81 \end{array}$	12168						
16	20.64	- TOO 4	29	1 22 25	12147						
17	-27 20	20T T	30	+10.21	+2TT 2 3.2						
18	24.56	-20I 2	31	+16.25	1206 4						
19	-24.50 + 2.81 -21.75	-200.1	32	+13.10	+200.4 - 6.0						
,	15		,								

MIMAS.

				1								
Jan.	0	o.7	0.	Jan. 20	7.0	W	Febr. 9	13.3	0.	März 1	ь 19.7	W.
47 60111	0	12.0	w.	20	18.3	0.	10	0.6		2	7.0	0.
	0	23.4	O.	21	5.6	W.	10	11.9	0.	2	18.3	w.
	1	10.7	W.	21	16.9	0.	10	23.2	w.	3	5.6	0.
	1	22.0	0.	22	4.3	W.	11	10.5	0.	3	17.0	w.
	2	9.3	W.	22	15.6	0.	11	21.9	W.	4	4.3	0.
	2	20.6	0.	23	2.9	W.	12	9.2	0.	4	15.6	
	3	7.9	W.	23	14.2	0.	12	20.5	W.	5	2.9	0.
	3	19.2	Ō.	24	1.5	W.	13	7.8	0.	5	14.2	
	4	6.5	W.	24	12.8	0.	13	19.1	W.	6	1.5	0.
	4	17.8	().	25	0.1	W.	14	6.4	0.	6	12.8	W.
	5	5.1	W.	25	11.4	0.	14	17.7	W.	7	0.1	0.
	5	16.4	().	25	22.7	W.	15	5.0	0.	7	11.4	W.
	6	3.7	W.	26	10.0	0.	15	16.4	W.	7	22.8	0.
	6	15.1	().	2 6	21.3	W.	16	3.7	0.	8	10.1	W.
	7	2.4	W.	27	8.7	0.	16	15.0	W.	8	21.4	0.
	7	13.7	0.	27	20.0	W.	17	2.3	0.	9	8.7	W.
	8	1.0	W.	28	7.3	0.	17	13.6	W.	9	20.0	0.
	8	12.3	().	28	18.6	W.	18	0.9	().	10	7.3	W.
	8	23.6		29	5.9	0.	18	12.2	W.	10	18.6	0.
	9	10.9	0.	29	17.2	W.	18	23.5	().	11	5.9	W.
	9	22.2	W.	30	4.5	0.	19	10.8	W.	11	17.3	().
	IO	9.5	().	30	15.8	W.	19	22.2	0.	12	4.6	W.
	10	20.8	W.	31	3.1	0.	20	9.5	W.	12	15.9	().
	11	8.2	0.	31	14.4	W.	20	20.8	0.	13	3.2	
	11	19.5	W.	Febr. 1	1.7	0.	21	8.1	W.	13	14.5	().
	12	6.8	0.	1	13.1	W.	2,1	19.4	0.	14		
	12	18.1	W.	2	0.4	0.	22	6.7	W.	14	13.1	().
	13	5.4	().	2	11.7	W.	22	18.0	().	15	0.4	
	13	16.7	W. O.	2	23.0	(),	23	5.3	W.	15	11.7	
	14 14	15.3	W.	3	10.3	W.	23	16.7		15	23.1	
	15	2.6	0.	3	8.9		24	4.0	W.	16	10.4	
	15	13.9	W.	4 4	20.2		24	15.3 2.6			21.7	
	16	1.2	0.	5	7.5		25 25	13.9		17	9.0	
	16	12.6	W.	5	18.8		26	13.9		18	7.6	
	16	23.9	(),	6	6.1		26	12.5	0.	18	18.9	
	17	11.2	W.	6	17.4		26	23.8		19		
	17	22.5	0.	7	4.8					_	1 -	
	18				16.1			İ				
	18	21.1	0.				1			1		
	19			8				-				
	19	19.7		9		w.	März 1			21		
	18 18	9.8 21.1 8.4	W. O. W.	7 8 8	16.1 3.4 14.7	0. W. 0.	27 27 28 28 28 März 1	9.8 21.1 8.4	W. (). W.	20 20 21 21	4.9 16.2 3.5	0. W.

MIMAS (Fortsetzung).

März22 2.1 0. Okt. 21 2.9 0. Nov. 10 9.0 W. Nov. 30 22 13.4 W. 21 14.2 W. 10 20.3 0. Dez. 1 23 0.7 0. 22 1.5 0. 11 7.6 W. 23 12.0 W. 22 12.8 W. 11 18.9 0. 24 10.7 W. 23 11.4 W. 12 17.5 0. 24 10.7 W. 23 11.4 W. 12 17.5 0. 24 22.0 0. 23 22.7 0. 13 4.9 W. 25 9.3 W. 24 10.0 W. 13 16.2 0. 25 9.6 0. 24 21.3 0. 14 13.5 W. 25 19.9 0. 15 2.1 W. 5	
22 13.4 W. 21 14.2 W. 10 20.3 0. Dez. 1 23 0.7 0. 22 1.5 0. 11 7.6 W. 1 23 12.0 W. 22 12.8 W. 11 18.9 0. 2 24 10.7 W. 23 0.1 0. 12 6.2 W. 2 24 10.7 W. 23 11.4 W. 12 17.5 0. 2 24 22.0 0. 23 22.7 0. 13 4.9 W. 3 25 9.3 W. 24 10.0 W. 13 16.2 0. 3 25 9.6 O. 24 21.3 0. 14 3.5 W. 4 25 19.9 O. 15 2.1 W. 5 26 7.2 W. 15 13.4 O. 6 26 18.5 O. 16 0.7 W. 6 27 5.8 W. 16 12.0 O. 6 Okt. 7 11.0 W. 27 17.1 O. 16 23.3 W. 7 7 22.3 O. 28 4.5 W. 17 10.6 O.	15.2 ().
23 0.7 0. 22 1.5 0. 11 7.6 W. 12 12.8 W. 11 18.9 0. 22 23 23.4 0. 23 0.1 0. 12 6.2 W. 22 22.7 0. 12 6.2 W. 22 22 22.7 0. 12 6.2 W. 22 22 22 0. 13 4.9 W. 33 16.2 0. 33 33 16.2 0. 33 34.9 W. 4 34 34 49 W. 34 34 49 W. 33 36.2 0. 36 36 36 36 36 36 36 36 36 36 36 36 36 36 37 37 <td>2.5 W.</td>	2.5 W.
23 12.0 W. 22 12.8 W. 11 18.9 0. 22 23 23.4 0. 23 0.1 0. 12 6.2 W. 24 10.7 W. 23 11.4 W. 12 17.5 0. 22 24 22.0 0. 23 22.7 0. 13 4.9 W. 33 25 9.3 W. 24 10.0 W. 13 16.2 0. 33 25 20.6 0. 24 21.3 0. 14 3.5 W. 14 14.8 0. 25 19.9 0. 15 2.1 W. 26 18.5 0. 16 0.7 W. 26 18.5 0. 16 0.7 W. 27 5.8 W. 16 12.0 0. 60 0. 77 W. 27 17.1 0. 16 23.3 W. 77 22.3 0. 28 4.5 W. 17 10.6 0. 77 21.9 W. 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 20.9 0. 29 3.1 W. 18 9.2 0. 8 20.9 0. 30 1.7 W. 19 7.8 0. 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 19.5 0. 31 13.0 0. 19 19.1 W. 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 19.1 W. 10 16.7 0. 31 22.9 W. 21 5.1 0. 11 16.7 0. 31 22.9 W. 21 5.1 0. 11 16.4 W. Nov. 1 10.2 0. 21 16.4 W. 11	13.8 0.
24 10.7 W. 23 11.4 W. 12 17.5 0. 2 24 22.0 0. 23 22.7 0. 13 4.9 W. 3 25 9.3 W. 24 10.0 W. 13 16.2 0. 3 25 20.6 0. 24 21.3 0. 14 3.5 W. 4 25 8.6 W. 14 14.8 0. 4 25 19.9 0. 15 2.1 W. 5 26 7.2 W. 15 13.4 0. 5 26 18.5 0. 16 0.7 W. 6 27 5.8 W. 16 12.0 0. 6 0kt. 7 11.0 W. 27 17.1 0. 16 23.3 W. 7 22.3 0. 28 4.5 W. 17 10.6 0. 7 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 8 20.9 0. 29 3.1 W. 18 9.2 0. 8 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 10 6.8 W. 31 10.6 0. 10.0	r.r W.
24 22.0 0. 23 22.7 0. 13 4.9 W. 3 25 9.3 W. 24 10.0 W. 13 16.2 0. 3 25 20.6 0. 24 21.3 0. 14 3.5 W. 4 25 8.6 W. 14 14.8 0. 4 25 19.9 0. 15 2.1 W. 5 26 7.2 W. 15 13.4 0. 5 26 18.5 0. 16 0.7 W. 6 27 5.8 W. 16 12.0 0. 6 6 27 17.1 0. 16 23.3 W. 7 7 22.3 0. 28 4.5 W. 17 10.6 0. 7 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 8 20.9 0. 29 3.1 W. 18 20.5 W. 9 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 10 18.1 0.	12.4 0.
25 9.3 W. 24 10.0 W. 13 16.2 0. 3 3.5 W. 4 21.3 0. 14 14.8 0. 4 14.8 0. 4 14.8 0. 4 14.8 0. 4 14.8 0. 4 14.8 0. 4 14.8 0. 4 14.8 0. 4 14.8 0. 4 14.8 0. 4 14.8 0. 15 13.4 0. 5 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 16 12.0 0. 17 10.6 0. 17 10.6 0. 17 10.6 0. 17 10.6 0. 17 10.6 0. 18 10.6 0. 19 10.6 0. 10.6 0. 10	23.7 W.
25 20.6 0. 24 21.3 0. 14 3.5 W. 4 25 8.6 W. 14 14.8 0. 44 25 19.9 0. 15 2.1 W. 5 26 18.5 0. 16 0.7 W. 6 27 5.8 W. 16 12.0 0. 6 Okt. 7 11.0 W. 27 17.1 0. 16 23.3 W. 7 22.3 0. 28 4.5 W. 17 10.6 0. 7 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 20.9 0. 29 3.1 W. 18 9.2 0. 8 9 8.2 W. 29 14.4 0. 18 20.5 W. 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 12 4.1 W. Nov. 1 10.2 0. 21 16.4 W. 11	11.0 ().
Okt. 7 11.0 W. 25 8.6 W. 14 14.8 0. 4 26 7.2 W. 15 13.4 0. 5 26 18.5 0. 16 0.7 W. 6 27 5.8 W. 16 12.0 0. 6 6 27 17.1 0. 16 23.3 W. 7 7 22.3 0. 28 4.5 W. 17 10.6 0. 7 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 8 20.9 0. 29 3.1 W. 18 20.5 W. 9 9 8.2 W. 29 14.4 0. 18 20.5 W. 9 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 11 16.7 0. 31 22.9 W. 21 5.1 0.<	22.3 W.
Okt. 7 11.0 W. 27 15.8 W. 16 12.0 0. 6 0kt. 7 11.0 W. 27 17.1 0. 16 23.3 W. 7 10.6 0. 28 4.5 W. 17 10.6 0. 7 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 8 20.9 0. 29 3.1 W. 18 9.2 0. 8 9 8.2 W. 29 14.4 0. 18 20.5 W. 9 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 11 16.7 0. 31 22.9 W. 21 5.1 0. 11 12 4.1 W. Nov. 1 10.2 0. 21 16.4 W. 11	9.6 ().
Okt. 7 11.0 W. 26 7.2 W. 15 13.4 0. 5 26 18.5 0. 16 0.7 W. 6 27 5.8 W. 16 12.0 0. 6 6 27 17.1 0. 16 23.3 W. 7 7 22.3 0. 28 4.5 W. 17 10.6 0. 7 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 8 20.9 0. 29 3.1 W. 18 9.2 0. 8 9 8.2 W. 29 14.4 0. 18 20.5 W. 9 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 11 16.7 0. 31 22.9 W. 21 5.1 0. 11 12 4.1 W. Nov. 1 10.2	20.9 W.
Okt. 7 11.0 W. 26 18.5 O. 16 0.7 W. 6 7 22.3 O. 28 4.5 W. 16 12.0 O. 6 8 9.6 W. 28 17.1 O. 16 23.3 W. 7 8 9.6 W. 28 15.8 O. 17 10.6 O. 7 8 20.9 O. 29 3.1 W. 18 9.2 O. 8 9 8.2 W. 29 14.4 O. 18 20.5 W. 9 9 19.5 O. 30 1.7 W. 19 7.8 O. 9 10 6.8 W. 30 13.0 O. 19 19.1 W. 10 10 18.1 O. 31 0.3 W. 20 6.4 O. 10 11 5.4 W. 31 11.6 O. 20 17.7 W. 10 11 16.7 O. 31 22.9 W. 21 5.1 O. 11 12 4.1 W. Nov. 1 10.2 O. 21 16.4 W. 11	8.2 ().
Okt. 7 11.0 W. 27 5.8 W. 16 12.0 0. 6 7 22.3 0. 28 4.5 W. 17 10.6 0. 7 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 8 20.9 0. 29 3.1 W. 18 9.2 0. 8 9 8.2 W. 29 14.4 0. 18 20.5 W. 9 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 11 16.7 0. 31 22.9 W. 21 5.1 0. 11 12 4.1 W. Nov. 1 10.2 0. 21 16.4 W. 11	19.5 W.
Okt. 7 11.0 W. 27 17.1 O. 16 23.3 W. 7 7 22.3 O. 28 4.5 W. 17 10.6 O. 7 8 9.6 W. 28 15.8 O. 17 21.9 W. 8 8 20.9 O. 29 3.1 W. 18 9.2 O. 8 9 8.2 W. 29 14.4 O. 18 20.5 W. 9 9 19.5 O. 30 1.7 W. 19 7.8 O. 9 10 6.8 W. 30 13.0 O. 19 19.1 W. 10 10 18.1 O. 31 0.3 W. 20 6.4 O. 10 11 5.4 W. 31 11.6 O. 20 17.7 W. 10 11 16.7 O. 31 22.9 W. 21 5.1 O. 11 12 4.1 W. Nov. 1 10.2 O. 21 16.4 W. 11	6.8 0.
7 22.3 0. 28 4.5 W. 17 10.6 0. 7 8 9.6 W. 28 15.8 0. 17 21.9 W. 8 9 8.2 W. 29 14.4 0. 18 20.5 W. 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 12 4.1 W. Nov. 1 10.2 0. 21 16.4 W. 11	18.1 W.
8 9.6 W. 28 15.8 O. 17 21.9 W. 8 8 20.9 O. 29 3.1 W. 18 9.2 O. 8 9 8.2 W. 29 14.4 O. 18 20.5 W. 9 9 19.5 O. 30 1.7 W. 19 7.8 O. 9 10 6.8 W. 30 13.0 O. 19 19.1 W. 10 10 18.1 O. 31 0.3 W. 20 6.4 O. 10 11 5.4 W. 31 11.6 O. 20 17.7 W. 10 11 16.7 O. 31 22.9 W. 21 5.1 O. 11 12 4.1 W. Nov. 1 10.2 O. 21 16.4 W. 11	5.5 ().
8 20.9 0. 29 3.1 W. 18 9.2 0. 8 9 8.2 W. 29 14.4 0. 18 20.5 W. 9 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 11 16.7 0. 31 22.9 W. 21 5.1 0. 11 12 4.1 W. Nov. 1 10.2 0. 21 16.4 W. 11	16.8 W.
9 8.2 W. 29 14.4 0. 18 20.5 W. 9 19.5 0. 30 1.7 W. 19 7.8 0. 9 19.6 0. 10 6.8 W. 30 13.0 0. 19 19.1 W. 10 18.1 0. 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 11 16.7 0. 31 22.9 W. 21 5.1 0. 11 12 4.1 W. Nov. 1 10.2 0. 21 16.4 W. 11	4.1 ().
9 19.5 (). 30 1.7 W. 19 7.8 (). 9 10 6.8 W. 30 13.0 (). 19 19.1 W. 10 18.1 (). 31 0.3 W. 20 6.4 (). 10 15.4 W. 11 16.7 (). 31 22.9 W. 21 5.1 (). 11 16.7 (). Nov. 1 10.2 (). 21 16.4 W. 11	15.4 W.
10 6.8 W. 30 13.0 0. 19 19.1 W. 10 10 18.1 0. 31 0.3 W. 20 6.4 0. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 11 16.7 0. 31 22.9 W. 21 5.1 0. 11 12 4.1 W. Nov. 1 10.2 0. 21 16.4 W. 11	2.7 ().
10 18.1 0. 31 0.3 W. 20 6.4 0. 10 11 5.4 W. 31 11.6 0. 20 17.7 W. 10 11 16.7 0. 31 22.9 W. 21 5.1 0. 11 12 4.1 W. Nov. 1 10.2 0. 21 16.4 W. 11	14.0 W.
11 5.4 W. 31 11.6 (). 20 17.7 W. 10 11 16.7 (). 31 22.9 W. 21 5.1 (). 11 2 4.1 W. Nov. 1 10.2 (). 21 16.4 W. 11	1.3 (). 12.6 W.
11 16.7 (). 12 4.1 W. Nov. 1 10.2 (). 21 16.4 W.	-
12 4.1 W. Nov. 1 10.2 (). 21 16.4 W. 11	11.2 W.
	22.5 0.
12 15.4 (). I 21.5 W. 22 3.7 (). 12	
13 2.7 W. 2 8.8 O. 22 15.0 W. 12	
13 14.0 (). 2 20.1 W. 23 2.3 (). 13	
14 1.3 W. 3 7.4 O. 23 13.6 W. 13	0
14 12.6 (). 3 18.7 W. 24 0.9 (). 14	***
14 23.9 W. 4 6.0 O. 24 12.2 W. 14	18.4 0.
15 11.2 O. 4 17.3 W. 24 23.5 O. 15	5.7 W.
15 22.5 W. 5 4.7 (). 25 10.8 W. 15	17.0 ().
16 9.8 0. 5 16.0 W. 25 22.1 0. 16	4.3 W.
16 21.1 W. 6 3.3 O. 26 9.4 W. 16	15.6 ().
17 8.4 0. 6 14.6 W. 26 20.7 0. 17	
17 19.7 W. 7 1.9 (). 27 8.0 W. 17	14.2 ().
18 7.0 0. 7 13.2 W. 27 19.3 0. 18	3
18 18.3 W. 8 0.5 (). 28 6.6 W. 18	
19 5.6 0. 8 11.8 W. 28 17.9 0. 19	
19 16.9 W. 8 23.1 (). 29 5.3 W. 19	0
20 4.3 0. 9 10.4 W. 29 16.6 0. 19	
20 15.6 W. 9 21.7 O. 30 3.9 W. 20	10.1 ().

MIMAS (Fortsetzung).

ENCELADUS.

			1311(01)	mi Co.			
Jan. o	10.0 W.	Jan. 21	15.6 O.	Febr. 11	21.4 W.	März 5	3.3 ().
I	2.5 ().	22	8.1 W.	12	13.8 0.	5	19.7 W.
1	18.9 W.	23	0.5 ().	13	6.3 W.	6	12.1 0.
2	11.3 ().	23	17.0 W.	13	22.7 ().	7	4.6 W.
3	3.8 W.	24	9.4 0.	14	15.2 W.	7	21.0 ().
3	20.2 ().	25	1.8 W.	15	7.6 ().	8	13.5 W.
4	12.7 W.	25	18.3 ().	16	o.i W.	9	5.9 0.
5	5.1 ().	26	10.7 W.	16	16.5 ().	9	22.4 W.
5	21.6 W.	27	3.2 ().	17	9.0 W.	10	14.8 ().
6	14.0 ().	27	19.6 W.	18	1.4 ().	11	7.3 W.
7	6.5 W.	28	12.1 ().	18	17.9 W.	11	23.7 0.
7	22.9 ().	29	4.5 W.	19	10.3 ().	12	16.2 W.
8	15.3 W.	29	20.9 ().	20	2.8 W.	13	
9	7.7 0.	30	13.4 W.	2,0	19.2 ().	14	
10	0.1 W.	31	5.8 0.	2.1	11.7 W.	14	17.5 0.
10	16.6 0,	31	22.3 W.	22	4.1 0.	15	10.0 W.
11	9.0 W.	Febr. 1	14.7 0.	22	20.6 W.	16	
12	1.5 0.	2	7.1 W.	23	13.0 ().	16	18.9 W.
12	17.9 W.	2	23.6 0.	24	5.5 W.	17	
13	10.3 ().	3	16.0 W.	24	21. 9 0.	18	3.8 W.
14.	2.8 W.	4	-	25	14.4 W.	18	
14	19.2 0.	5	0.9 W.	26	6.8 0.	19	,
15	11.7 W.	5	17.4 0.	26	23.2 W.	20	
16	4.1 0.	6	9.8 W.	27	15.7 0.	2,0	21.6 W.
16	20.6 W.	7	2.2 0.	28	8.1 W.	21	14.1 0.
17	13.0 0.	7	18.7 W.	März 1	0.6 0.	22	6.5 W.
18	5.4 W.	8	11.1 0.	1	17.0 W.	22	23.0 0.
18	21.9 0.	9	3.6 W.	2,	9.5 0.	23	15.4 W.
19	14.3 W.	9	20.0 ().	3	1.9 W.	24	
20	6.8 0.	IO	12.5 W.	3	18.4 0.	25	
20	23.2 W.	11	4.9 ().	4	10.8 W.	25	16.8 0.

ENCELADUS (Fortsetzung).

				1									
Okt.	7	0.6	w.	Okt. 28	6.2	0.	Nov. 18	11,8	w.	Dez.	9	17.3	0.
	7	17.0	0.	28	22.7		19		0.		IO.	9.8	
	8	9.4	w.	29	15.1		19	20.6			11	2.2	0.
	9	1.9	0.	30	7-5	W.	20	13.1			11	18.6	W.
	9	18.3	W.	31	0.0	0.	21		W.		12	ıı.ı	0.
I	0	10.8	O.	31	16.4	W.	21	22.0	0.		13	3.5	W.
1	1	3.2	W.	Nov. I	8.8	().	22	14.4	W.		13	19.9	0.
I	I	19.7	0.	2	1.3	w.	23	6.8	0.		14	12.4	W.
I	2	12.1	W.	2	17.7	0.	23	23.3	W.		15	4.8	0.
1	3	4.5	0.	3	IO.I	W.	24	15.7	0.		15		
1	3	21.0	w.	4	2.6	0.	25	8.1	W.		16	13.7	
ĭ	4	13.4	0.	4	19.0	w.	26	0.6	0.		17	6.1	W.
1	5	5.9	W.	5	11.5	0.	26	17.0	W.		17	22.6	0.
I	5	22.3	0.	6	3.9	W.	27	9.5	0.		18	15.0	W.
1	6	14.7	W.	6	20.3	().	28	1.9	W.		19	7.4	0,
I	7	7.2	0.	7	12.8	W.	28	18.3	0.		19	23.9	W.
1	7	23.6	W.	8	5.1	0.	29	10.8	W.		20	16.3	0.
1	8	16.1	0.	8	21.6	W.	30	3.2	0.		21	8.7	W.
1	19	8.5	W.	9	14.1	0.	30	19.6	W.		22	1.2	0.
2	20	1.0	0.	10	6.5	W.	Dez. 1	12.1	0.		22	17.6	W.
2	20	17.4	W.	10	23.0	0.	2	4.5	W.		23	10.1	Ο.
2	21	9.8	0.	11	15.4	W.	2	21.0	0.		24	2.5	W.
2	22	2.3	W.	12	7.8	0.	3	13.4	W.		24	18.9	0.
2	22	18.7	0.	13	0.3	W.	4	5.8	0.		25	11.4	W.
2	23	11.2		13	16.7	0.	4	22.3	W.		2 6	3.8	0.
2	44	3.6	0.	11	9.1	W.	5	14.7	0.	1	26	20.2	W.
2	44	20.0	W.	15	1.6	0.	6	1	W.		27	12.7	0.
2	2 5	12.5	0.	15	18.0	W.	6	23.6	0.		28	5.1	W.
2	26	4.9	W.	16	10.5	0.	7	16.0			28	21.5	Ο.
2	26	21.3		17	2.9		8	8.5	0.		29		
2	27	13.8	W.	17	19.3	0.	9	0.9	W.		30		
				11							30	22.8	W.
											31	15.3	0.

TETHYS.

Jan. o	16.0 O.	Jan. 5	10.1 W.	Jan. 10	3.5 O.	Jan. 14	20.8 W.
	15.5 W.	_	8.8 0.		2.2 W.		19.4 ().
2	14.2 ().	7	7.5 W.	12	0.8 0.	16	18.1 W.
3	12.8 W.	8	6.2 0.	12	23.5 W.	17	16.7 0.
4	11.5 0.	9	4.9 W.	13	22.1 0.	18	15.4 W.

TETHYS (Fortsetzung).

		1		1	1	ı	1
Jan. 19	14.0 ().	Febr. 28	5.6 ().	Okt. 16	15.8 0.	Nov. 25	6.8 O.
20	12.7 W.	März 1	4.3 W.	17	14.5 W.	26	5.4 W.
21	11.3 ().	2	3.0 0.	18	13.1 ().	27	4.1 ().
22	10.0 W.	3	1.6 W.	19	11.8 W.	28	2.7 W.
23	8.6 ().	4	0.3 ().	20	10.4 ().	29	1.4 ().
24	7.3 W.	4	22.9 W.	2,1	9.1 W.	30	0.0 W.
25	5.9 ().	5	21.6 0.	22	7.7 0.	30	22.7 ().
26	4.6 W.	6	20.3 W.	23	6.4 W.	Dez. 1	21.3 W.
27	3.2 ().	7	18.9 ().	24	5.0 ().	2	20.0 ().
28	1.9 W.	8	17.6 W.	25	3.6 W.	3	18.6 W.
29	0.5 ().	9	16.3 ().	2 6	2.3 ().	4	17.2 ().
29	23.2 W.	10	14.9 W.	27	0.9 W.	5	15.9 W.
30	21.8 ().	11	13.6 0.	27	23.6 0.	6	14.5 ().
31	20.5 W.	12	12.2 W.	28	22.2 W.	7	13.2 W.
Febr. 1	19.1 ().	13	10.9 0.	29	20.9 ().	8	11.8 0.
2	17.8 W.	14	9.6 W.	30	19.5 W.	9	10.5 W.
3	16.4 ().	15	8.2 ().	31	18.1 0.	10	9.1 ().
4	15.1 W.	16	6.9 W.	Nov. 1	16.7 W.	11	7.7 W.
5	13.7 ().	17	5.5 0.	2	15.3 0.	12	6.4 ().
6	12.4 W.	18	4.2 W.	3	14.0 W.	13	50 W.
7	11.0 ().	19	2.9 ().	4	12.6 ().	14	3.7 ().
8	9.7 W.	20	1.5 W.	5	11.3 W.	15	2.3 W.
9	8.3 ().	21	0.2 ().	6	9.9 0.	16	1.0 ().
IO	7.0 W.	2,1	22.9 W.	7	8.6 W.	16	23.6 W.
11	5.6 ().	22	21.5 ().	8	7.2 ().	17	22.3 ().
12	4.3 W.	23	20.2 W.	9	5.8 W.	18	20.9 W.
13	3.0 0.	24	18.8 ().	10	4.5 0.	19	19.5 0.
14	1.6 W.	25	17.5 W.	11	3.1 W.	20	18.2 W.
15	0.3 ().			12	1.8 0.	21	16.8 0.
15	23.0 W.			13	0.4 W.	22	15.5 W.
16	21.6 ().			13	23.1 0.	23	14.1 0.
17	20.3 W.			14	21.7 W.	24	12.8 W.
18	19.0 0.	Okt. 7	5.3 0.	15	20.4 0.	25	11.4 0.
19	17.6 W.	8	4.0 W.	16	19.0 W.	26	10.1 W.
20	16.3 0.	9	2 .6 0.	17	17.6 0.	27	8.7 0.
21	15.0 W.	10	1.3 W.	18	16.3 W.	28	7.3 W.
2.2	13.6 ().	IO	23.9 0.	19	14.9 0.	29	6.0 0.
23	12.3 W.	II	22.6 W.	20	13.6 W.	30	4.6 W.
24	11.0 ().	12	21.2 0.	21	12.2 0.	31	3.3 0.
25	9.6 W.	13	19.9 W.	22	10.9 W.	32	1.9 W.
26	8.3 0.	14	18.5 0.	23	9.5 0.	1 100	
27	7.0 W.	15	17.2 W.	24	8.2 W.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

DIONE.

			DI	JINIA.			
Jan. o	6.8 O	Febr.14	10.7 W.	Okt. 7	23.8 W.	Nov. 22	3.0 O
1	15.7 W		1	9	8.6 ().	23	11.9 W.
3	0.5 ().	17	4.4 W.	IO	17.4 W.	24	20.7 ().
4	9.4 W	. 18	13.2 ().	12	2.3 ().	26	5.5 W.
5	18.2 ().	19	22.1 W.	13	11.1 W.	27	14.3 ().
7	3.1 W	2.1	7.0 ().	14	19.9 ().	28	23.1 W.
8	11.9 ().	22	15.8 W.	16	4.8 W.	30	8.0 ().
9	20.7 W	24	0.7 0.	17	13. 6 0.	Dez. 1	16.8 W.
11	5.6 ().	25	9.5 W.	18	22.4 W.	3	1.6 ().
12	14.4 W	26	18.4 ().	20	7.3 0.	4	10.4 W.
13	23.2 0.	28	3.3 W.	21	16.1 W.	5	19.2 ().
15		März 1	12.1 ().	23	0.9 ().	7	4.0 W.
16	16.9 0.	2	21.0 W.	24	9.8 W.	8	12.9 ().
18	1.7 W	4	5.8 0.	25	18.6 ().	9	21.7 W.
19	1 0.6 0.	5	14.7 W.	27	3.4 W.	II	6.5 ().
20	19.4 W		23.5 0.	28	12.2 ().	12	15.3 W.
22	4.2 ().	8	8.4 W.	29	21.1 W.	14	o.i ().
23	13.1 W	9	17.3 ().	31	5.9 ().	15	9.0 W.
24	21.9 ().	11	2.I W.	Nov. 1	14.7 W.	16	,
26	6.7 W.	12	11.0 0.	2	23.5 0.	18	2.6 W.
27	15.6 0.	13	19.8 W.	4	8.3 W.	19	11.4 0.
29	0.4 W.	15	4.7 0.	5	17.2 0.	20	20.3 W.
30	9.3 0.	16	13.6 W.	7	2.0 W.	22	5.1 O.
31	18.1 W.	17	22.4 0.	8	10.8 0.	23	13.9 W.
Febr. 2	3.0 0.	19	7.3 W.	9	19.6 W.	2.4	22.7 ().
3	11.8 W.	20	16.2 0.	II	4.4 ().	26	7.6 W.
4	20. 7 0.	22	I.O W.	12	13.3 W.	27	16.4 ().
6	5.5 W.	23	9.9 0.	13	22. I 0.	29	1.2 W.
7	1 4.4 0.	24	18.8 W.	15	6.9 W.	30	10.0 0.
8	23.2 W.	26	3. 6 0.	16	15.7 0.	31	18.8 W.
10	8.1 O.			18	o.6 W.		
II	17.0 W.			- 19	9.4 ().		
13	1.8 0.			20	18.2 W.		

RHEA.

			1			1		- 5		ı		
Jan. o	12.9	0.	Jan. 16	8.2	W.	Febr.	I	3.6	0.	Febr. 16	23.2	W.
2	19.1	W.	18	14.4	0.		3	9.8	W.	19	5.5	0.
5	1.3	0.	20	20.6	W.		5	16.1	0.	2.1	11.7	W.
7	7.4	W.	23	2.8	0.		7	22.3	W.	23	18.0	0.
9	13.6	0.	25	9.0	W.	1	o	4.5	0.	26	0.2	W.
II	19.8	W.	27	15.2	0.	1	12	10.7	W.	28	6.5	0.
14	2.0	0.	29	21.4	w.	. 1	14	17.0	0.	März 2	.12.8	W.

RHEA	(Fortsetzung).
------	----------------

			TULL	(Forescrame).		
März 4	19.0 O.	Okt. 7	21.6 O.	Nov. 6	5.9 W.	Dez. 5 13.9 0.
7	1.3 W.	10	3.8 W.	8	12.1 ().	7 20.1 W.
9	7.6 0.	12	10.0 0.	IO	18.3 W.	10 2.2 ().
11	13.8 W.	14	16.2 W.	13	0.4 ().	12 8.4 W.
- 13	20.1 ().	16	22.4 0.	15	6.6 W.	14 14.5 ().
16	2.3 W.	19	4.6 W.	17	12.7 0.	16 20.7 W.
18	8.6 0.	21	10.8 0.	19	18.9 W.	19 2.8 ().
20	14.8 W.	23	17.0 W.	22	1.1 ().	21 9.0 W.
22	21.1 ().	25	23.2 0.	24	7.2 W.	23 15.2 ().
25	3.3 W.	28	5.3 W.	26	13.4 ().	25 21.3 W.
27	9.6 ().	30	11.5 0.	28	19.5 W.	28 3.5 ().
29	15.8 W.	Nov. 1	17.6 W.	Dez. 1	1.7 ().	30 9.6 W.
31	22.1 ().	3	23.8 0.	3	7.8 W.	32 15.8 ().

TITAN.

Jan.	6	3.0	w.	Febr.22	23.2	w.	Okt.	13	8.9	0.	Nov. 30	1.8	0.
	14	6.2	().	März 3	3.4	(),		21	2.0	W.	Dez. 7	18.4	W.
											15	22.7	(),
				19	3.5	0.	Nov.	5	23.8	W.	23	15.7	W.
Febr	. 7	0.0	W.					14	4.4	().	31	19.9	Ο,
	15	3.8	0.					21	21.2	W.			

HYPERION.

										Nov. 21		
17	6.0	0.	28	20.3	0.		20	21.7	0.	Dez. 2	4.1	0.
26	19.0	W.	Märzio	11.8	W.		31	2.5	W.	12	8.3	W.
Febr. 7	12.8	0.	22	4.2	0.	Nov.	II	1.0	0.	23	7.6	

Elongationen und Konjunktionen.

2 9	J 1	18.6 Untere Konjunktion 19.4 Westliche Elongation
	2.3 Untere Konjunktion 22.0 Westliche Elongation	12.2 Obere Konjunktion 10.9 Östliche Elongation

		1				
Jan. 5	8 ^h	♂ ♂ C	Juli	т6	16h	4 o C
-	16					♀ σ α Tauri, ♀ 2° 27' nördl.
	23			18		
13	_	3 6 24, 3 0° 47' südl.		21	-	\$ o th, \$ 1° 18′ südl.
14		Ψ 8 O		28	4	
17		to €		28		\$ P O
	15	\$ d O		29		
25		ੋਂ ਨੂੰ ਨੂੰ Sagittar., ਨੂੰ 2° 45' nördl.		29	7	
		24 of (20	Q d (()
			Aug.		0	4
3		3 0 0			17	
IC		₽ d ((22		♥ gr. westl. Elong., 18° 25'
12		Q gr. östl. Elong., 46° 41'		24	7	
12		♥ obere of ⊙		25	20	***
14		to o		25	21	3' d (
März 2		24 & €		28	13	2 0 €
4		3 3 4		30	7	Ž d €
9	4	¥ d 《	Sept.	3	1	♀ of α Leonis, ♀ 1° 9' nördl.
IC		♥ gr. östl. Elong., 18° 19'		8	22	24 0 €
11	_	2 4 €		16	- 1	⊈ obere ♂ ⊙
	13	ta d €		22	- 1	to €
19	6	Ç im größten Glanz		23	9	♂ ♂ 《
27	16	Ş untere ♂ ⊙		25	0	Q σ α Leonis, Q 0° 17' nördl.
29		4 ♂ €		2 7	IO	\$ ♂ ((
April 2	14	3' ♂ ((Okt.	6	7	24 & ((
8	6	२४ ((19	10	to d €
10	0	to 0		21	14	3' 0 (
24	15	♀ untere ♂ ⊙		27	9	
2 4	18	♥ gr. westl. Elong., 27° 12'		30	2.1	
26	3	24 ♂ (31	16	
Mai I		3' ♂ €	Nov.	I	17	Ф gr. östl. Elong., 23° 34'
3	21	¥ ♂ 《		2		24 ♂ €
4		2 ℃ 《		9	5	\$\delta \alpha \text{Scorpii}, \$\delta \alpha \text{o' n\text{o'rdl.}}\$
7		to d (15		to 0
23		24 ♂ €		18	8	3 0 €
29		to d ⊙			18	♥ untere of ⊙
30		Q im größten Glanz		26		2 4 €
31	2	3' 6 €		27	0	¥ 0 €
Juni I		2 4 C		30	- 1	4 d (
I	- 1		Dez.	2		Ф о Q,
4		to €	Dez.	6	9 22	\$ 0 €, ⊈ 1 35 Hordi.
		40 C		8		Q δ Scorpii, Q 2° 57' nördl.
29	15	3° o €			12	Q σ β Scorpii, Q o° 9' südl.
30	8	5 9 (C		9	12	
Juli I	16			10	13	♥ gr. westl. Elong 21° 1'
		to of C		12	17	to of C
3	17	♀ gr. westl. Elong., 45° 44′		14	11	\$\timeg\$ of \$\beta\$ Scorpii, \$\timeg\$ o\cent{o}\$ 52' n\tilde{\text{o}}\tag{c}\$.
5	4	4 8 O		15	11	♂ d (
5	15	Şσ (C X αn Satl Flanα α6° τα/		26	7	우 ♂ ((
7	41	abla gr. östl. Elong., 26° 12'		28	14	24 of ((

Zur Berechnung der physischen Mondlibration 1913.

		M'	ω	12	b	M	M'	ω	Be	wegun	g vo	n M
Jan. 0 10 20 30	54.8 185.4 316.1 86.7	358.6 8.4 18.3 28.1	135.6 137.2 138.9 140.5	Juli Aug.	9 19 29 8	17.1 147.8 278.4 49.1	185.8 195.7 205.5 215.4	166.8 168.5 170.1 171.7	1 2 3 4	13.1 26.1 39.2 52.3	6 7 8 9	78.4 91.5 104.5 117.6
Febr. 9	217.4	38.0	142.2		18	179.7	225.3	173.4	5	65.3	10	130.6
März 1 11 21 31 April 10 20	348.0 118.7 249.3 20.0 150.6 281.3 51.9	77.4 87.3 97.1 107.0	143.8 145.5 147.1 148.7 150.4 152.0 153.7	Sept.	17 27 7 17 27	310.4 81.0 211.7 342.3 113.0 243.6 14.3	235.I 245.0 254.8 264.7 274.5 284.4 294.2	180.0 181.6 183.3 184.9	1 2 3 4 5 6	0.5 1.1 1.6 2.2 2.7	13 14 15 16 17 18	7.1 7.6 8.2 8.7 9.3
Mai 10	182.6 313.2 83.9	116.8 126.7 136.5	155. 3 157.0 158.6	Nov.	6 16 26	144.9 275.6 46.2	304.1 314.0 323.8	186.5 188.2 189.8	7 8	3·3 3.8 4·4	19	9.8 10.3 10.9
Juni 9 19 29	214.5 345.2 115.8 246.5	146.4 156.3 166.1 176.0	160.2 161.9 163.5 165.2	Dez.	6 16 26 36	176.9 307.5 78.2 208.8	333.7 343.5 353.4 3.2	191.5 193.1 194.8 196.4	9 10 11 12	4.9 5.4 6.0 6.5	2.I 22 23	11.4 12.0 12.5 13.1

M = Mittlere Anomalie des Mondes.

M' = Mittlere Anomalie der Sonne.

 $\omega = Abstand$ des Mondperigäums vom aufsteigenden Knofen der Mondbahn auf der Ekliptik.

J = 1° 32′ 6″ = Mittlere Neigung des Mondaquators gegen die Ekliptik.

 $\tau = -12'' \sin M + 59'' \sin M' + 18'' \sin 2 \omega$.

 $\rho = -107'' \cos M + 37'' \cos (M + 2 \omega) - 11'' \cos (2 M + 2 \omega).$

 $\sigma \sin J = - \log^n \sin M + 37^n \sin (M + 2 \omega) - 11^n \sin (2 M + 2 \omega).$

τ, ρ, σ sind die Beträge der physischen Mondlibration in selenographischer Länge, der Neigung und dem Knoten des Mondäquators auf der Ekliptik.

Tafel zur Berechnung der optischen Mondlibration.

λ-8°	Δλ	1 a	B^{\vee}	λ-88	Δλ	i a	В
0	+0.0	1.07	+0° 0.0 1.6	0.5	+0.6	+ 45	-1-0°52.8
1	0.0	+37 37	\circ th	35 36	0.6	46	0 54.1
2	0.0	37	0 22	37	0.6	47	0.55.4
3	0.1	37	0.48 1.0	38	0.6	47	0 567 1.3
4	0.1	37	0 6.4	39	0.6	48	0 58.0
			1.6		+0.6		1.2
5	- -0.1	+37	1.6	40	0.6	+ 49	+0 59.2 I 0.4
	0.1	37 38	0 9.6 1.6 0 11.2 -6	41	0.6	49 50	I 1.6
7 8	0.1	38	0.12 8 1.0	42	0.6	51	I 2.8 1.2
	0.2	38	0 14.4	43 44	0.6	52	I 4.0
9		_	1.6				1.2
10	+0.2	+38	+0 16.0 1.6	45	+0.6	+ 53	+1 5.2
11	0.2	38	0 17.6	46	0.6	54	I 6.3 I.I
12	0.2	38	0 19.1	47	0.6	55	1 7.4 1.1
13	0.3	38	0 20.7 1.6	48	0.6	56	1 8.5 1.1
14	0.3	38	0 22.3	49	0.6	57	1 9.6
15	+0.3	+39	+0.220	50	+0.6	-+- 58	-I-I IO.6
16	0.3	39	0 25.4 1.6	5 T	0.6	59	I II.7 1.1
17	0.3	39	0 27.0	52	0.6	60	1 12.7 1.0
18	0.4	39	0 28.5 1.6	53	0.6	61	1 13.7 0.9
19	0.4	39	0 30.1	54	0.6	63	I 14.0
20	+0.4	+40	+0 31.6	55	+0.6	+ 65	+1 15.5
2.1	0.4	40	O 22.T	56	0.6	67	T 16.4
22	0.4	40	0.246	57	0.6	69	T 172 0.9
23	0.4	41	0 36.1	58	0.6	71	1 18.1
24	0.5	41	0 37.5	59	0.5	73	1 19.0 0.9
25	+0.5	-1-41	+0 30.0	60	-1-0.5	1- 75	- 1 -1 19.8 0.8
26	0.5	4T	0.404	61	0.5	77	1 20.6 0.7
27	0.5	42	0 41.9	62	0.5	79	1 21.3 0.8
28	0.5	42	0 43.3 1.4	63	0.5	82	1 22.1
29	0.5	43	0 44.7	64	0.5	85	1 22.8
30	+0.5	+43	+0 46.1	65	+0.5	+ 88	+I 23.5 c.6
31	0.5	43	0 47.5 T.2	66	0.5	92	1 24.1
32	0.6	44	0 48.8 1.3	67	0.4	96	1 24.8 0.6
33	0.6	44	0 50.1 1.3	68	0.4	100	1 25.4 0.6
34	0.6	45	0 51.4	69	0.4	104	I 26.0
35	+0.6	- H 45	+0 52.8	70	-1 0.4	-1-109	4-1 26.5

Tafel zur	Berechnung	der	optischen	Mondlibration.
-----------	------------	-----	-----------	----------------

λ-83	Δλ	i a	В	λ-83	Δλ	ı a	В
70°	-1-0.4	-1109	+1°26.5 0.6	80°	+0.2	+ 215	+1°30.7 0.2
71	0.4	115	1 27.1	81	0.2	239	1 30.9 0.2
72	0.4	121	1 27.6	82	0.2	268	I 31.1
73	0.3	128	I 28.I	83	O.I	306	I 31.3 0.2
74	0.3	136	1 28.6	84	0.1	357	I 31.5 0.2
75	+0.3	+144	+1 29.0	85	+0.1	+ 429	+1 31.7
76	0.3	154	1 29.4	86	O.I	535	1 31.8 0.1
77	0.3	166	1 29.8 0.3	87	0.1	713	1 31.9 0.1
78	0.2	180	1 30.1 0.3	88	0.0	1070	1 32.0
79	0.2	196	1 30.4 0.3	89	0.0	+2139	1 32.1
80	+0.2	+215	+1 30.7	90	0.0	00	+1 32.1

 $J=1^{\circ}32'6''=$ Neigung des Mondäquators gegen die Ekliptik.

8 = 180° + Ω = Länge des absteigenden Knotens der Mondbahn auf der Ekliptik (siehe Tafel S. 88).

λ, β = Länge und Breite des Mondmittelpunktes, berechnet für den Beobachtungsort.

$$\Delta \lambda = \operatorname{tg} \frac{J^2}{2} \sin 2 (\lambda - \Im) 3437.75 \qquad \frac{1}{a} = \frac{1}{\cos (\lambda - \Im) \sin J}$$

 $tg B = \sin(\lambda - \Im) tg J$

l_o = Mittlere Länge des Mondes (siehe Tafel S. 88)

l', b' = Optische Libration der Mondmitte in selenographischer Länge und Breite

$$l' = \lambda + \Delta\lambda - \frac{B - \beta}{\frac{1}{a}} - l_0$$

 $b' = B - \beta$.

Für λ — \Im zwischen 90° und 180° gehe man mit dem Argument 180° — $(\lambda$ — \Im) in die Tafel ein und nehme $\Delta\lambda$ und $\frac{1}{a}$ negativ.

Für $\lambda = 3$ zwischen 180° und 270° gehe man mit dem Argument $\lambda = 3 - 180$ ° in die Tafel ein und nehme $\frac{1}{a}$ und B negativ.

Für λ — \otimes zwischen 270° und 360° gehe man mit dem Argument 360° — $(\lambda$ — \otimes) in die Tafel ein und nehme $\Delta\lambda$ und B negativ.

Bruchteile des Jahres 1913,

für o^h Mittl. Zeit der mittleren Sonnentage, gezählt vom Beginn des annus fictus.

Monats-	Jan	nuar	Fel	ruar	M	ärz	A	pril	N.	Iai	Jı	ıni
tag	Jahres- tag	Jahres- bruch	Jahres- tag	Jahres- bruch	Jahres tag	Jahres- bruch	Jahres tag	Jahres- bruch	Jahres- tag	Jahres- bruch	Jahres- tag	Jahres- bruch
I	0	0.0014	31	0.0862	59	0.1629	90	0.2478	120	0.3299	151	0.4148
2	1	0041	32	0890	60	1656	91	2505	121	3327	152	4175
3	2	0068	33	0917	61	1684	92	2533	122	3354	153	4203
4	3	0096	34	0945	62	1711	93	2560	123	3381	154	4230
5	4	0123	35	0972	63	1739	94	2587	124	3409	155	4257
6	5	0.0151	36	0.0999	64	0.1766	95	0.2615	125	0.3436	156	0.4285
7	6	0178	37	1027	65	1793	96	2642	126	3463	157	4312
8	7	0205	38	1054	66	1821	97	2669	127	3491	158	4340
9	8	0233	39	1081	67	1848	98	2697	128	3518	159	4367
10	9	0260	40	1109	68	1875	99	2724	129	3546	160	4394
11	10	0.0287	41	0.1136	69	0.1903	100	0.2752	130	0.3573	161	0.4422
12	11	0315	42	1164	70	1930	IOI	2779	131	3600	162	4449
13	12	0342	43	1191	71	1958	102	2806		3628	163	4476
14	13	0370	44	1218	72	1985	103	2834	133	3655	164	4504
15	14	0397	45	1246	73	2012	104	2861	134	3682	165	4531
16	15	0.0424	46	0.1273	74	0.2040	105	0.2888	135	0.3710	166	0.4559
17	16	0452	47	1300	75	2067	106	2916	136	3737	167	4586
8r	17	0479	48	1328	76	2094	107	2943	137	3765	168	4613
19	18	0506	49	1355	77	2122	108	2971	138	3792	169	464 r
20	19	0534	50	1383	78	2149	109	2998	139	3819	170	4668
21	20	0.0561	51	0.1410	79	0.2177	110	0.3025	140	0.3847	171	0.4695
22	21	0589	52	1437	80	2204	III	3053	141	3874	172	4723
23	22	0616	53	1465	81	2231	112	3080		3901	173	4750
24	23	0643	54	1492	82	2259	113	3108	143	3929	174	4778
25	24	0671	55	1519	83	2286	114	3135	144	3956		4805
26	25	0.0698	56	0.1547	84	0.2313	115	0.3162	145	0.3984	176	0.4832
27	2 6	0726	57	1574	85	2341	116	3190	146	4011	177	4860
28	27	0753	58	1602	86	2368	117	3217	147	4038		4887
29	28	0780	59	1629	87	2396		3244	148	4066	179	4915
30	29	0808			88	2423	119	3272	149	4093	180	4942
31	30	0.0835			89	0.2450	120	0.3299	150	0.4121	181	0.4969
32	31	0862		1	90	2478			151	4148		

Bruchteile des Jahres 1913,

für oh Mittl. Zeit der mittleren Sonnentage, gezählt vom Beginn des annus fictus.

Monats-	J	uli	Αι	igust	Septe	ember	Okt	tober	Nove	ember -	Deze	mber
tag	Jahres- tag	Jahres- bruch	Jahres tag	Jahres- bruch	Jahres- tag	Jahres- bruch	Jahres tag	Jahres- bruch	Jahres- tag	Jahres- bruch	Jahres- tag	Jahres- bruch
1	181	0.4969	212	0.5818	243	0.6667	273	0.7488	304	0.8337	334	0.9158
2	182	4997	213	5845	244	6694		7516	305	8364	335	9186
3	183	5024	214	5873	245	6722	275	7543	306	8392	336	9213
4	184	5051	215	5900	246	6749		7570	307	8419	337	9240
5	185	5079	216	5928	247	6776	277	7598	308	8446		9268
6	186	0.5106	217	0.5955	248	0.6804	278	0.7625	309	0.8474	339	0.9295
7	187	5134	218	5982	249	6831	279	7652	310	8501	340	9323
8	188	5161	219	6010	250	6858	280	7680	311	8529	341	9350
9	189	5188	220	6037	251	6886		7707	312	8556	342	9377
10	190	5216	221	6064	252	6913	282	7735	313	8583	343	9405
11	191	0.5243	222	0.6092	253	0.6941	283	0.7762	314	0.8611	344	0.9432
12	192	5270	223	6119	254	6968	284	7789	315	8638	345	9459
13	193	5298	224	6147	255	6995	285	7817	316	8665	346	9487
14	194	5325	225	6174	256	7023	286	7844	317	8693	347	9514
15	195	5353	226	6201	257	7050	287	7871	318	8720	348	9542
16	196	0.5380	227	0.6229	258	0.7077	288	0.7899	319	0.8748	349	0.9569
17	197	5407	228	6256	259	7105	289	7926	320	8775	350	9596
18	198	5435	22 9	6283	260	7132	290	7954	321	8802	351	9624
19	199	5462	230	6311	261	7160	291	7981	322	8830	352	9651
20	200	5489	231	6338	262	7187	292	8008	323	8857	353	9678
21	201	0.5517	232	0.6366	263	0.7214	293	0.8036	324	0.8884	354	0.9706
22	202	5544	233	6393	264	7242	294	8063	325	8912	355	9733
23	203	5572	234	6420	265	7269	295	8091	326	8939	356	9761
24	204	5599	235	6448	266	7296	296	8118	327	8967	357	9788
25	205	5626	236	6475	267	7324	2 97	8145	328	8994	358	9815
26	206	0.5654	237	0.6502	268	0.7351	298	0.8173	329	0.9021	359	0.9843
27	207	5681	238	6530	269	7379	299	8200	330	9049	360	9870
28	208	5709	239	6557	270	7406	300	8227	331	9076	361	9898
29	209	5736	2 40	6585	271	7433	301	8255	332	9104	362	9925
30	210	5763	241	6612	272	7461	302	8282	333	9131	363	9952
31	211	0.5791	242	0.6639	273	0.7488	303	0.8310	334	0.9158	364	0.9980
32	212	5818	243	6667			304	8337			365	1.0007

Julianische Periode.

Anzahl der am Mittag des 1. Januar eines jeden Schaltjahrs seit Anfang der Periode verflossenen Tage.

Jahr n. Chr.	0	100	200	300	400	500	600	700	800	900
	17	17	17	18	18	19	19	19	20	20
0	21058	57583	94108	30633	67158	03683	40208	76733	13258	49783
4	22519	59044	95569	32094	68619	05144	41669	78194	14719	51244
8	23980	60505	97030	33555	70080	06605	43130	79655	16180	52705
12	25441	61966	98491	35016	71541	08066	44591	81116	17641	54166
16	26902	63427	99952	36477	73002	09527	46052	82577	19102	55627
20	28363	64888	01413	37938	74463	10988	47513	84038	20563	57088
24	29824	66349	02874	39399	75924	12449	48974	85499	22024	58549
28	31285	67810	0.1335	40860	77385	13910	50435	86960	23485	60010
32	32746	69271	05796	42321	78846	15371	51896	88421	24946	61471
36	34207	70732	07257	43782	80307	16832	53357	89882	26407	62932
40	35668	72193	08718	45243	81768	18293	54818	91343	27868	64393
44	37129	73654	10179	46704	83229	19754	56279	92804	29329	65854
48	38590	75115	11640	48165	84690	21215	57740	94265	30790	67315
52	40051	76576	13101	49626	86151	22676	59201	95726	32251	68776
56	41512	78037	14562	51087	87612	24137	60662	97187	33712	70237
60	42973	79498	16023	52548	89073	25598	62123	98648	35173	71698
64	44434	80959	17484	54009	90534	27059	63584	00109	36634	73159
68	45895	82420	18945	55470	91995	28520	65045	01570	38095	74620
72	47356	83881	20406	56931	93456	29981	66506	03031	39556	76081
76	48817	85342	21867	58392	94917	31442	67967	04492	41017	77542
80	50278	86803	23328	59853	96378	32903	69428	05953	42478	79003
84	51739	88264	24789	61314	97839	34364	70889	07414	43939	80464
88	53200	89725	26250	62775	99300	35825	72350	08875	45400	81925
92	54661	91186	27711	64236	00761	37286	73811	10336	46861	83386
96	56122	92647	29172	65697	02222	38747	75272	11797	48322	84847
100	57583	94108	30633	67158	03683	40208	76733	13258	49783	86308
	17	17	r8	18	19	19	19	20	20	20

Jahr n. Chr.	Tage	Jahr n. Chr.	Tage
0	1721058	1580	2298153
I	1721424	1581	2298519
2,	1721789	1582	2298884
3	1722154	1583	2299239
4	1722519	1584	2299604

Julianische Periode.

Anzahl der am Mittag des 1. Januar eines jeden Schaltjahrs seit Anfang der Periode verflossenen Tage.

Jahr n. Chr.	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900
	20	21	21	21	2.2	22	23	23	23	24
0	86308	22833	59358	95883	32408	68933	05448	41973*	784.97*	15021*
4	87769	24294	60819	97344	33869	70394	06909	43433	79957	16481
8	89230	25755	62280	98805	35330	71855	08370	44894	81418	17942
12	9069I	27216	63741	00266	36791	73316	09831	46355	82879	19403
16	92152	28677	65202	01727	38252	74777	11292	47816	84340	20864
20	93613	30138	66663	03188	39713	76238	12753	49277	85801	22325
2.1	95074	31599	68124	04649	41174	77699	14214	50738	87262	23786
28	96535	33060	69585	06110	42635	79160	15675	52199	88723	25247
32	97996	34521	71046	07571	44096	80621	17136	53660	90184	26708
36	99457	35982	72507	09032	45557	82082	18597	55121	91645	28169
40	00918	37443	73968	10493	47018	83543	20058	56582	93106	29630
44	02379	38904	75429	11954	48479	85004	21519	58043	94567	31091
48	03840	40365	76890	13415	49940	86465	22980	59504	96028	32552
52	05301	41826	78351	14876	51401	87926	2444I	60965	97489	34013
56	06762	43287	79812	16337	52862	89387	25902	62426	98950	35474
60	08223	44748	81273	17798	54323	90848	27363	63887	00411	36935
64	09684	46209	82734	19259	55784	92309	28824	65348	01872	38396
68	11145	47670	84195	20720	57245	93770	30285	66809	°3333	39857
72	12606	49131	85656	22181	58706	95231	31746	68270	04794	41318
76	14067	50592	87117	23642	60167	96692	33207	69731	06255	42779
-80	15528	52053	88578	25103	61628	98153	34668	71192	07716	44240
84	16989	53514	90039	26564	63089	99604	36129	72653	09177	45701
88	18450	54975	91500	28025	64550	01065	37590	74114	10638	47162
. 92	19911	56436	92961	29486	66011	02526		75575	12099	48623
96	21372	57897	94422	30947	67472	03987	40512	77036	13560	50084
100	22833	59358	95883	32408	68933	05448	41973*	78497*	15021*	51545
	21	21	21	22	22	23	23	23	24	24

Anm. Die mit * bezeichneten Jahre sind Gemeinjahre.

Jahr n. Chr.	Tage	Jahr n. Chr.	Tage	Jahr n. Chr.	Tage
1700 1701 1702 1703	2341973 2342338 2342703 2343068 2343433	1800 1801 1802 1803 1804	2378497 2378862 2379227 2379592 2379957	1900 1901 1902 1903 1904	2415021 2415386 2415751 2416116 2416481

Zur Verwandlung der Mittl. Zeit in Sternzeit.

Та	ıfel I.	- 11		Tafe	el II.		
Red. auf StZt.	Mittl. Zt.	Red. auf StZt.	Mittl. Zt.	Red. auf StZt.	Mittl. Zt.	Red. auf St Zt.	Mittl. Zt.
+ o o o	h m s	+ 0.0	m s	+ 4.0	24 21	+ 8.o	48 42,
0 10	1 0 52	0.1	0 37	4.1	24 58	8.r	49 19
0 20	2 1 45	0.2	1 13	4.2	25 34	8.2	49 55
0 30	3 2 37	0.3	1 50	4.3	26 11	8.3	50 32
0 40	4 3 30	0.4	2 26	4.4	26 47	8.4	51 8
0 50	5 4 22	0.5	3 3	4.5	27 24	8.5	51 45
		0.6	3 39	4.6	28 0	8.6	52 21
+10	6 5 15	0.7	4 16	4.7	28 37	8.7	52 58
I 10	7 6 7	0.8	4 52	4.8	29 13	8.8	53 34
I 20	8 6 59	0.9	5 29	4.9	29 50	8.9	54 11
1 30	9 7 52	+ 1.0	6 5	+ 5.0	30 26	1.00	5 A AH
I 40	10 8 44	1.1	6 42	7-5.0 5.I	-	+ 9.0	54 47
1 50	11 9 37	1.2	7 18	5.2	31 3 31 39	9.1 9.2	55 24 56 0
+20	12 10 29	1.3	7 55	1	32 16	_	56 37
2 10	13 11 21	1.4	8 31	5·3 5·4	32 52	9.3	50 37 57 X3
2 20	14 12 14	1.5	9 8	5.5	33 29	9.4 9.5	
2 30	15 13 6	1.6	9 44	5.6	34 5	9.5	57 50 58 26
2 40	16 13 59	1.7	IO 2I	5.7	34 42	9.7	59 3
2 50	17 14 51	1.8	10 57	5.8	35 18	9.8	59 39
_	,	1.9	11 34	5.9	35 55	9.9	60 16
+3 0	18 15 44			3.7	22.22).)	
3 10	19 16 36	+ 2.0	12 10	+6.0	36 31		
3 20	20 17 28	2.1	12 47	6.1	37 8		
3 30	21 18 21	2.2	13 23	6.2	37 44		
3 40	22 19 13	2.3	14 0	6.3	38 21	Tafe	I III.
3 50	23 20 6	2.4	14 36	6.4	38 57		
4 0	24 20 58	2.5	15 13	6.5	39 34	8	nı nı
		2.6	15 49	6.6	40 10	- - 0.01	0 4
		2.7	16 26	6.7	40 47	0.02	0 7
		2.8	17 2	6.8	41 23	0.03	0 11
		2.9	17 39	6.9	42 0	0.04	0 15
		1.00	18 16	1 70	42.07	0.05	0 18
		+ 3.0	18 53	-l- 7.0	42 37	0.06	0 22
		3.1		7.1	43 14	0.07	0 26
		3.2	19 29 20 6	7.2	43 50	0.08	0 29
		3.3	20 42	7·3 7·4	44 27	0.09	0 33
		3.4	21 19		45 3 45 40	0.10	0 37
		3.5	21 55	7.5 7.6	46 16		
		3.7	22 32	7.7	46 53		
		3.8	23 8	7.8	47 29		
		3.9	23 45	7.9	48 6		

HÜLFSTAFELN.

Zur Verwandlung der Sternzeit in Mittl. Zeit.

Ta	afel, I.	1 7		Tafe	el II.		
Red. auf Mittl. Zt.	Stern - Zt.	Red. auf Mittl. Zt.	Stern - Zt.	Red. auf Mittl. Zt.	Stern - Zt.	Red. auf Mittl. Zt.	Stern - Zt.
o o	h m 8	0.O	0 0	— 4.0	24 25 s	— 8.o	48 [™] 50
0 10	I I 2	0.1	0 37	4.1	25 2	8.1	49 27
0 20	2 2 5	0.2	1 13	4.2	25 38	8.2	50 3
0 30	3 3 7	0.3	1 50	4.3	26 15	8.3	50 40
0 40	4 4 10	0.4	2 26	4.4	26 51	8.4	51 16
0 50	5 5 12	0.5	3 3	4.5	27 28	8.5	51 53
,		0.6	3 40	4.6	28 5	8.6	52 30
-10	6 6 15	0.7	4 16	4.7	28 41	8.7	53 6
I IO	7 7 17	0.8	4 53	4.8	29 18	8.8	53 43
1 20	8 8 19	0.9	5 30	4.9	29 55	8.9	54 20
1 30	9 9 22		, ,		7 55	1 0	
I 40	10 10 24	- 1.0	6 6	— 5.0	30 31	- 9.0	54 56
1 50	11 11 27	I.I	6 43	5.1	31 8	9.1	55 33
		1.2	7 19	5.2	31 44	9.2	56 9
-2 o	12 12 29	1.3	7 56	5.3	32 21	9.3	56 46
2 10	13 13 31	1.4	8 32	5.4	32 57	9.4	57 22
2 20	14.14.34	1.5	9 9	5.5	33 34	9.5	57 59
2 30	15 15 36	1.6	9 46	5.6	34 11	9.6	58 36
2 40	16 16 39	1.7	10 22	5.7	34 47	9.7	59 12
2 50	17 17 41	1.8	10 59	5.8	35 24	9.8	59 49
-3 0	18 18 44	1.9	11 36	5.9	36 I	9.9	60 26
3 10	19 19 46	- 2.0	12 12	6.0	36 37		
3 20	20 20 48	2.1	12 49	6.1	37 14		
3 30	21 21 51	2.2	13 25	6.2	37 50		
3 40	22 22 53	2.3	J4 2	6.3	38 27	Tafe	el III.
3 50	23 23 56	2.4	14 38	6.4	39 3	4 6	
4 0	24 24 58	2.5	15 15	6.5	39 40	8	n s
		2.6	15 52	6.6	40 17	- 0.01	0 4
		2.7	16 28	6.7	40 53	0.02	0 7
	100	2.8	17 5	6.8	41 30	0.03	0 11
		2.9	17 42	6.9	42 7	0.04	0 15
						0.05	o 18
		3.0	18 19	-7.0	42 44	0.06	0 22
	25-3	3.1	18 56	7.1	43 21	0.07	0 26
		3.2	19 32	7.2	43 57	0.08	0 29
	V-0 35	3.3	20 9	7.3	44 34	0.09	0 33
	50 x } E	3.4	20 45	7.4	45 10	0.10	0 37
	1 8	3.5	21 22	7.5	45 47		1
	1, 60	3.6	21 59	7.6	46 24		
	1.23	3.7	22 35	7.7	47 0		
	66	3.8	23 12	7.8	47 37		
		3.9	23 49	7.9	48 14		

Zur Verwandlung von Stunden, Minuten und Sekunden in Dezimalteile des Tages und umgekehrt.

Tag	h ı	n s	Tag	h m s	Tag	h m s
0.01	0 1	1 24	0.36	8 38 24	0.71	17 2 24
0.02	0 2	8 48	0.37	8 52 48	0.72	17 16 48
0.03	0 4:	3 12	0.38	9 7 12	0.73	17 31 12
0.04	0 5'	7 36	0.39	9 21 36	0.74	17 45 36
0.05	I I	2 0	0.40	9 36 0	0.75	18 0 0
0.06	I 20	5 24	0.41	9 50 24	0.76	18 14 24
0.07	I 40	2 48	0.42	10 4 48	0.77	18 28 48
0.08	1 5		0.43	10 19 12	0.78	18 43 12
0.09	2 9	9 36	0.44	10 33 36	0.79	18 57 36
0.10	2 2	4 0	. 0.45	10 48 0	0.80	19 12 0
0,11	2 3	8 24	0.46	11 2 24	0.81	19 26 24
0.12	2 5	2 48	0.47	11 16 48	0.82	19 40 48
0.13	3 '	7 12	0.48	11 31 12	0.83	19 55 12
0.14	3 2	I 36	0.49	11 45 36	0.84	20 9 36
0.15	3 3	6 0	0.50	12 0 0	0.85	20 24 0
0.16		24	0.51	12 14 24	0.86	20 38 24
0.17	4 4	4 48	0.52	12 28 48	0.87	20 52 48
0.18	4 19	9 12	0.53	12 43 12	0.88	21 7 12
0.19	4 3:	3 36	0.54	12 57 36	0.89	21 21 36
0.20	4 4	8 0	0.55	13 12 0	0.90	21 36 0
0.21		2 24	0.56	13 26 24	0.91	21 50 24
0.22	5 10	5 48	0.57	13 40 48	0.92	22 4 48
0.23	5 3	1 12	0.58	13 55 12	0.93	22 19 12
0.24		5 36	0.59	14 9 36	0.94	22 33 36
0.25	6	0 0	0.60	14 24 0	0.95	22 48 0
0.26		4 24	0.61	14 38 24	0.96	23 2 24
0.27	6 2	8 48	0.62	14 52 48	0.97	23 16 48
0.28	6 4	3 12	0.63	15 7 12	0.98	23 31 12
0.29	6 5'	7 36	0.64	15 21 36	0.99	23 45 36
0.30	7 1:	2 0	0.65	15 36 0	1.00	24 0 0
0.31		6 24	0.66	15 50 24	68 2	1/2 1
0.32		o 48	0.67	16 4 48	79.0	
0.33		5 12	0.68	16 19 12		
0.34		9 36	0.69	16 33 36	10	
0.35	8 2	4 0	0.70	16 48 0	0.0	

Zur Verwandlung von Stunden, Minuten und Sekunden in Dezimalteile des Tages und umgekehrt.

Tag	m s	Tag	m s	Tag	m s	Tag	8
0.0001	0 8.64	0.0036	5 11.04	0.0071	10 13.44	0.00001	0.864
02	0 17.28	37	5 19.68	72	10 22.08	2	1.728
03	0 25.92	38	5 28.32	73	10 30.72	3	2.592
04	0 34.56	39	5 36.96	74	10 39.36	4	3.456
05	0 43.20	40	5 45.60	75	10 48.00	5	4.320
06	0 51.84	41	5 54.24	76	10 56.64	6	5.184
07	1 0.48	42	6 2.88	77	11 5.28	7	6.048
08	1 9.12	43	6 11.52	78	11 13.92	8	6.912
09	1 17.76	44	6 20.16	79	11 22.56	9	7.776
10	1 26.40	45	6 28.80	80	11 31.20	10	8.640
11	1 35.04	46	6 37.44	8r	11 39.84		
12	1 43.68	47	6 46.08	82	11 48.48		
13	1 52.32	48	6 54.72	83	11 57.12		
14	2 0.96	49	7 3.36	84	12 5.76		
15	2 9.60	50	7 12.00	85	12 14.40		
16	2 18.24	51	7 20.64	86	12 23.04	0.000001	0.086
17	2 26.88	52	7 29.28	87	12 31.68	2	0.173
18	2 35.52	53	7 37.92	88	12 40.32	3	0.259
19	2 44.16	54	7 46.56	89	12 48.96	4	0.346
20	2 52.80	55	7 55.20	90	12 57.60	5	0.432
21	3 I.44	56	8 3.84	91	13 6.24	6	0.518
22	3 10.08	57	8 12.48	92	13 14.88	7	0.605
23	3 18.72	58	8 21.12	93	13 23.52	8	0.691
24	3 27.36	59	8 29.76	94	13 32.16	9	0.778
25	3 36.00	60	8 38.40	95	13 40.80	10	0.864
26	3 44.64	61	8 47.04	96	13 49.44		
27	3 53.28	62	8 55.68	97	13 58.08	0	
28	4 1.92	63	9 4.32	98	14 6.72		
29	4 10.56	64	9 12.96	99	14 15.36		
30	4 19.20	65	9 21.60	100	14 24.00	-11	
31	4 27.84	66	9 30.24			1 -	
32	4 36.48	67	9 38.88				
33	4 45.12	68	9 47.52				
34	4 53.76	69	9 56.16			5	
35	5 2.40	70	10 4.80				

Hülfsgrößen zur Berechnung der Präzession nach Newcomb von den Katalogepochen t. bis 1913.0.

t = 1913.0.

	4		
t_{\circ}	$m^{\mathrm{s}} (t-t_{\mathrm{o}})$	$\log \left[n^{8} \left(t - t_{\circ} \right) \right]$	$\log [n''(t-t_o)]$
1755 1790 1800 1810 1825	+8 ^m 5.234 6 17.786 5 47.082 5 16.376 4 30.315	2.324734 2.215949 2.179113 2.138863 2.070495 2.045086	3.500825 3.392040 3.355204 3.314954 3.246586
1835 1836 1840 1842	+4 14.960 3 59.605 3 56.534 3 44.249 3 38.106	2.018098 2.012493 1.989322 1.977255	3.221177 3.194189 3.188584 3.165413 3.153346
1845 1850 1855 1860 1864	-+3 28.892 3 13.536 2 58.178 2 42.820 2 30.534	1.958503 1.925330 1.889412 1.850256 1.81617	3.134594 3.101421 3.065503 3.026347 2.99226
1865 1870 1872 1875 1880	-+2 27.462 2 12.103 2 5.960 1 56.745 1 41.385	1.80722 1.75944 1.73875 1.70575 1.64447	2.98331 2.93553 2.91484 2.88184 2.82057
1885 1890 1895 1900 1910	+1 26.025 1 10.665 0 55.303 0 39.942 0 9.218	1.57311 1.48768 1.38122 1.23989 0.60305	2.74921 2.66377 2.55731 2.41598 1.77915

m und n sind die Newcombschen Konstanten für die Epoche $\frac{1}{2}$ $(t+t_{\circ})$.

Ist α' , δ' der genäherte Sternort für die Zeit $\frac{1}{2}(t+t_{\circ})$, so ist $\alpha = \alpha_{\circ} + [m^{s}(t-t_{\circ})] + [n^{s}(t-t_{\circ})] \sin \alpha' \operatorname{tg} \delta'$ $\delta = \delta_{\circ} + [n''(t-t_{\circ})] \cos \alpha'$.

Hülfsgrößen zur Übertragung mittlerer Polsternörter von dem Äquinoktium to auf 1913.0.

t =	1913.0.
-----	---------

t.	ζ.	z	Θ
1755	60 38.34	60 40.32	52 48.12
1790	47 12.83	47 14.03	41 6.19
1800	43 22.64	43 23.65	37 45.65
1810	39 32.42	39 33.26	34 25.11
1825	33 47.06	33 47.68	29 24.32
1830	31 51.93	31 52.48	27 44.06
1835	29 56.80	29 57.28	26 3.80
1840	28 1.66	28 2.08	24 23.55
1845	26 6.51	26 6.88	22 43.29
1850	24 11.36	24 11.68	21 3.04
1855	22 16.21	22 16.47	19 22.79
1860	20 21.04	20 21.27	17 42.54
1865	18 25.88	18 26.06	16 2.29
1870	16 30.70	16 30.85	14 22.04
1875	14 35.53	14 35.64	12 41.80
1880	12 40.34	12 40.43	11 1.55
1885	10 45.15	10 45.22	9 21.31
1890	8 49.96	8 50.00	7 41.07
1895	6 54.76	6 54.79	6 0.84
1900	4 59.56	4 59.57	4 20.60
1905	3 4.35	3 4.35	2 40.37
1910	1 9.13	1 9.13	1 0.14

Sind α_o , δ . die Koordinaten für t_o , α , δ jene für t, so hat man:

$$a_{\circ} = a_{\circ} + \zeta_{\circ}$$

$$p = (\tan g \delta_{\circ} + \cos a_{\circ} \tan g \frac{1}{2} \Theta) \sin \Theta$$

$$\tan g \Delta a = \frac{p \sin a_{\circ}}{1 - p \cos a_{\circ}}$$

$$\alpha = a_{\circ} + z + \Delta a$$

 $\tan g \frac{1}{2} (\delta - \delta_o) = \cos (a_o + \frac{1}{2} \Delta a) \sec \frac{1}{2} \Delta a \tan g \frac{1}{2} \Theta$ oder, fast immer ausreichend genau:

$$\hat{\mathfrak{d}} = \hat{\mathfrak{d}}_{\circ} + \Theta \cos \left(a_{\circ} + \frac{\imath}{2} \Delta a\right) \sec \frac{\imath}{2} \Delta a.$$

Name	See- höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Sechöhe
Abbadia	69 ^m	+43°22′52.2	-⊢I 0 34.9	+ 9.95	43 11 22.8	0.000333
Åbo		+60 26 56.8	-0 35 31.50		+60 I7 3.I	9.999322 9.998902
Adelaide	43	-34 55 38.5			-34 44 50.9	9.999529
Albany (N. Stw.)	40	-1-42 39 I2.6		+57.28	-1-42 27 44.5	9.999329
Alfred Centre N.Y.	556	+42 15 19.8		+59.91	+42 3 52.5	9.999384
Algier (N. Stw.) 2) .	342	+36 47 50	+0 41 26.42		+36 36 48	9.999505
Allegheny (N. Stw.)	370	+40 28 58.1			+40 17 36.3	9.999416
Allegheny (A. Stw.)	349	+40 27 41.0			- + -40 16 20.0	9.999415
Altenburg ³)	229	+50 58 20	+0 3 50.64		+50 47 4	9.999413
Altona MerKreis 1)	31	+53 32 45.3			+53 21 44.5	9.999065
Amherst (Neue Stw.)	110	-1-42 21 56.			42 IO 29.0	9.99934I
Amherst (Alte Stw.)	122	+42 22 17.		-	+42 10 49.6	9.999351
Annapolis		+38 58 53.	3 .0 00 0		+38 47 38.5	9.999428
Ann Arbor	285				-1-42 5 20.7	9.999364
Arcetri Zentr. d. St. 5)	186	+43 45 14.4			+43 33 44.5	9.999321
Arequipa	245I	- 16 22 28.0			- 16 16 15.4	0.000053
Armagh	61	-54 2I I2.		+13.17	+54 10 17.8	9.999047
Athen		+37 58 19.		-	+37 47 10.3	9.999453
Bamberg (Remeis' St.)	299	+49 53 6.0	+0 10 1.23	+ 1.65	+49 41 45.0	9.999174
Barcelona ⁶)	_	+41 24 2	+0 44 59.7	+ 7.39	+41 12 37	9.999368
Beloit	-	+42 30 9	+6 49 42.2	+67.31	42 18 41	9.999340
Bergen		+60 23 54	+0 32 22.07	+ 5.32	+60 14 0	9.998903
Berkeley	97	+37 52 23.0	+9 2 37.56	+-89.14	+37 41 14.7	9.999462
Berlin Zentr. d. St. 7)	47	-1-52 30 16.	0 0 0.00	0.00	+52 19 9.0	9.999091
Berlin (Urania)		+52 31 30.	+0 0 7.40	+ 0.02	+52 20 23.2	9.999088
Bern	573	-1-46 57 8.	+0 23 49.25	+ 3.91	-+46 45 39.5	9.999266
Besançon	312	+-47 I4 59.0		+4.87	+47 3 30.3	9.999241
Bethlehem ⁸)		+40 36 23.	+5 55 6.74		40 25 1.3	9.999388
Birr Castle ⁹)		+53 5 47	+1 25 15.7	+14.00	+52 54 43	9.999073
Bogota	2700	+ 4 35 48	+5 50 34	+57.59	+ 4 33 58	0.000175
Bologna zentr.d. Stw.	_	+44 29 52.			+44 18 22.3	9.999289
Bombay (Colaba) .	19	+18 53 36.	-35740.90		+18 46 34.1	
Bonn Zentr. d. Stw	62	-1-50 43 45			+50 32 27.7	9.999136
Bordeaux (Floirac)	73	+44 50 7			+44 38 36.6	9.999286
Boston (University)	_	+42 21 32.	+5 37 49.8	+55.50	+42 10 5.0	9-999344
Bothkamp ¹⁰)	32	+54 12 9.	+0 13 3.6	+ 2.15	+54 1 13.6	9.999048

¹⁾ Dudley Observatory, seit Juni 1893. Alte Sternwarte 37".o nördlich, 75.10 östlich. — 2) Alte Sternwarte 3'.8 südlich. 85 östlich. — 3) Fr. Krüger. — 4) 1873 nach Kiel verlegt. — 5) Seit Oktober 1872, früher in Florenz. — 6) J. Comas Solá. — 7) Seit 1835. Alte Sternwarte 56".4 nördlich, o5.39 westlich. — 5) Sayre Observatory, auch South-Bethlehem. — 9) Earl of Rosse. — 10) Herr von Bülow.

Name	See- höhe	Geog	gr. F	Breite	vo		ge Serlin Stlich	Korr. der Sternzeit	0	. Breite	Log. p
Bremen (Olbers' Stw.) Breslau zentr. d. Stw. Breteuil Zentr. 1 Brisbane Brüssel (Alte St.) Pass.Instr. Brüssel (Uccle)	147 66 56		6 49 28 51	56.5 48 0	-0 +0 -9 +0	14 44 18 36	33.92 41.9 31.6	-2.39 $+7.34$ -91.75 $+5.93$	+50 +48 -27 +50	55 41.1 38 23 18 36 39 54.0	9.999°74 9.999132 9.999184 9.999693 9.999133
Budapest ²) Bukarest (Mil. Geogr. Inst.) Cambridge Engl Cambridge Mass. ⁸) . Cap d. gut. Hoffnung Catania	85 28 24 16	+47 +44 +52 +42 -33	28 24 12 22 56	49 34.2 51.6 47.6 3.2		22 50 53 38 20	38.9 52.21 12.05 5.82	- 3.73 - 8.36	+47 +44 +52 +42 -33	17 21 13 3.7 1 42.2 11 20.1 45 24.3	9.999221 9.999292 9.999097
Chapultepec (Alte Stw.) 4) Charkow Charlottesville 5) Chicago (Alte Stw.) 6) . Christiania MerKreis . Cincinnati (Alte Stw.) .	250 - 25	+50 +38 +41	0 2 50 54	10.2 1.2 1.0 43.7	I +-6 +-6 +-0	31 7 44 10	19.8 40.06 1.62 41.29	+73.96 -15.01 +60.40 +66.37 + 1.76 +64.32	+49 +37 +41 +59	48 49.7 50 51.4 38 34.8 44 43.5	9.999468 9.999357 9.998916
Cincinnati (Neue Stw.) ⁷) Cleveland (Case Obs.) Clinton (Litchfield Obs.) Coimbra Columbia Missouri ⁸) Cordoba	276 99	+43 +40 +38	30 3 12 56	14.5 16.5 24.5 51.7	+6 +5 +1 +7	20 55 27 2	0.66 12.28 17.9		+41 +42 +40	18 49.3 51 47.6 1 3.9 45 36.9	9.999365
Danzig	73 121		40 22 2 3	36.4 47.1 16.8 14.7	+7 0 0	53 53 1	22.47 18.43 19.94 21.03		+39 +58 +50 +50	29 18.1 12 29.5 51 1.0 51 59.0	9.999523 9.998953
Düsseldorf (Blik) Dunecht 11)	26 141 106 134	+51 +57 +54	9 46 57 55	25.0 36 6.2 23.2 28.0	0+ 1+ 0+ 1+	26 3 59 6 6	29.9 15 54·5 17.85 18.8	+ 4.35 +10.39 + 9.84 +10.89 +10.89	+51 +56 +54 +55 +55	1 10.0 59 6 35 14.6 46 41.7 44 46.2	9.999122

¹⁾ Bureau international des Poids et Mesures. — 2) Observ. der Kgl. ungar. Universität. — 3) Harvard College Observatory. — 4) 1883 nach Tacubaya verlegt. — 5) Leander Mc. Cormick Obs. der University of Virginia. — 6) 1887 geschlossen. — 7) Mount Lookout, seit 1873. — 8) Laws Observatory. — 9) University Park, Chamberlin Observatory. — 10) v. Engelhardt; Herbst 1897 aufgelöst. Alte Sternwarte 14".2 nördlich, 1".57 westlich. — 11) Earl of Crawford.

Name	See- höhe	Geog	gr. B	reite	vo		ge Serlin stlich	Korr. der Sternzeit	Geoz	. Breite	Log. p incl. Seehöhe
Flagstaff (Lowell Obs.) Florenz (Alto Stornw.) Florenz (Mil. Geogr. Inst.) Gent MerKrois Genua (Mar. Stw.) MerKr.	73 — 407	+43 +43 +46	46 46 11	4.1 49.3 59.1	+0	8 8 28	33.50 32.28 58.19	+ 1.40 + 1.40 + 2.76 + 2.94	+43 +43 +46	34 34.2 35 19.4 0 29.0	9.999308 9.999 2 74
Georgetown D. C Glasgow Schottl Glasgow Missouri Göttingen MerKreis Gohlis ²)	228 161 108	+39 +51 +51	52 13 31 21	42.6 45.6 48.2 35.0	+I +7 +0 +0	10 4 13 4	45·35 52.86 48.58 5·26	+59.45 +11.62 69.80 + 2.27 + 0.67 + 1.76	+55 +39 +51 +51	42 0.4 2 29.4 20 34.9 10 20.8	9.999 ⁰ 7 9.99943 ⁸ 9.999123 9.999123
Graz	375 47 - 4	+47 +51 +47 +53	4 28 33 13	37.2 38.1 42 19.1	0 -+0 -+0 -+0	8 53 35 27	13 34.80 57 19.6	- 1.35 + 8.80	+46 +51 +47 +53	53 8.2 17 24.5 22 14 2 16.1	9.999250
Hamburg (Bergedorf) M. Kr. Hamburg (D. Soewarte) . Hanover N. H Harrow (Col. Tupmann) .	40 30 — 66	+53 +53 +43 +51	28 32 42 34	46.0 51.8 15.2 47.4	+0 +0 +5 +0	12 13 42 54	37.06 41.38 42.80 54.7	+ 2.07 + 2.25 +56.30 + 9.19	+53 +53 +43 +51	17 44.7 21 51.0 30 45.4 23 33.5	9.999°67 9.999°65 9.999310 9.999115
Hastings on Huds. ⁴). Haverford Heidelberg (wolfe Stw.) Heidelberg (Königst.)MKr. St. Helena	570	+49	0 24 23	36.5 35 54.6	+0	54 18 18	46.4 41.67	-1-58.28 + 3.08	+39 +49 +49	49 16.7 13 12 12 31.7	9.999378 9.999403 9.999165 9.999204 9.999906
Helsingfors MerKreis . Helwan Herény (von Gothard) Ilongkong Hudson	38 119 229	+60 +29 +47 +22	9 51 15 18	42.6 33 47.4 13.2	o r o 6	46 11 12 43	14.30 47 49.8	- 7.60 -11.79 - 2.11 66.22	+59 +29	59 45.4 41 38 4 18.7 10 9.4	9.998912 9.999650 9.999235 9.999792 9.999372
Ipswich (Orwell Park) 5). Jena (Univers.) Zentr. d. st. Jena (Winkler) Johannesburg Kairo Kalocsa 6)	156 174 1806	+50 +50 -26 +30	55 56 10	35.6 15.7 55.0 38.2	-0 -0	7 58 11	14.58 14.07 43.20 34.00	+ 7.99 + 1.19 + 1.19 - 9.65 - 11.76 - 3.67	+50 4 +50 4 -26 +29 5	44 19.2 44 59.4 1 49.2 54 40.2	9.999137 9.999139 9.999842 9.999638

 ^{1) 1872} nach Arcetri verlegt. — ²) Winkler, August 1887 nach Jena verlegt. — ³) Seit 1853.
 früher Seeberg. — ⁴) Dr. Draper. — ⁵) Col. Tomline, — ⁶) Erzbischöfl. Haynaldsche Sternwarte.

Name	Sec- höhe	Geog	r. B	reite	von		erlin tlich	Korr. der Sternzeit		. Bı	eite	Log. p incl. Sechöhe
Karlsruhe 1)	110	+40	0	20.6	ь —	TO	50.40	+ 2.28	±48°	.10	5.4	9.999183
Kasan (Univers.)												9.999014
Kasan (Eugelhardt)												9.999014
Kew												9.999115
Kiel Neuer MerKreis												9.999047
Kiel Alter MerKreis								+ 2.13				9.999047
Kiew MerKreis							-	_				9.999151
Kis Kartal ²)		+47	41	54.8	0	24	36.8	- 4.04	+47	30	27.0	9.999208
Königsberg Reps. MKr. 3)	22	+54	42	50.6	-0	28	24.18	- 4.67	+54	31	58.6	9.999036
Kopenhagen (Neue Stw.)4)												9.999012
Kopenhagen (Urania St.)												9.999012
Krakau Mer. Kreis	221	- ⊢50	3	51.9	0	26	15.48	- 4.31	+49	52	31.6	9.999164
Kremsmünster MerKr.	384	+48	3	23.1	0	2	56.78	- 0.48	+47	51	56.1	9.999225
Landstuhl (Fauth)	385	-1-49	24	42.5	+0	23	18.45	+ 3.83	+49	13	19.7	9.999191
La Plata	_	-34	54	30	+4	45	11.9	+46.85	-34	43	43	9.999527
Leiden (Neue Stw.) MerKr.")		+52										9.999097
Leipzig (Neue Stw.) Zentr. 6)					+0	4	0.87					9.999125
Lemberg	338	-+49	50	11	0	42	29	— 6.98	+49	38	50	9.999177
Leyton 1)		+51	34	34.0	+0	53	35.7					9.999111
Lissabon (Neue Stw.)		_	-				19.58					9.999441
Lissabon (Mar. stw.)		+38										9.999435
Liverpool (Neue Stw.) 8)	61	+53						+10.82				9.999070
London ⁹)	_	+51										9.999112
Lübeck (Navig Sch.) .	19	+-53	51	31.1	+0	10	49.2	+ 1.78	+53	4.0	32.5	9.999056
Lund zentr. d. Stw	34	+55	4 I	52.0	+0	0	49.83	+ 0.14	-1-55	31	8.3	9.999013
Lussinpiccolo 10)		+44	32	11	-0	4	17.5	- 0.70	-44	20	40	9.999288
Lüttich Ougrée		+50						+ 5.15	+50	25	48	9.999144
Lyon												9.999279
Madison (Washburn Obs.)	293	+43						-1-67.55				9.999345
Madras	7	+13	4	8.1	-4	27	24.53	-43.93	+12	59	4.8	9.999926
Madrid zentr. d. Stw	655	+40	24	29.7	- -I	8	19.89	+11.23	+40	13	8.3	9.999437
Mailand Gr. Turm												9.999273
Manila	_											9.999909
Mannheim zentr. d. Stw.		+49	29	11.0	+0	19	44.38	+ 3.24	+-49	17	48.5	9.999170
Marburg	248	+50	48	46.9	+0	18	29.9	+ 3.04	+50	37	30.0	9.999147
Mare Island Calif	18	+38	5	55.8	+9	2	40.30	+89.15	-1-37	54	45.6	9.999451

^{1) 1896} nach Heidelberg verlegt. — 2) Baron von Podmaniczky. — 3) Nach 1898, vor 1898 of of westlich. — 4) Seit 1861 Nov. 11. Alte Sternwarte 20".3 südlich, of of westlich. — 5) Seit 1860. Alte Sternwarte 8".0 nördlich, of 42 östlich. — 6) Seit 1861. Alte Sternwarte 14".2 nördlich, 4".00 westlich. — 7) J. Gurney Barclay. — 8) Alte Sternwarte 44".0 nördlich, 17".1 östlich. — 5) Regents Park, G. Bishop 1836—61. — 10) Manora-Sternwarte.

Name	See- höhe	Geogr.	Breite	von	inge Berlin restlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Sechöhe
Markree (Col. Cooper) . Marseille (N. St.) MKr. ¹) Melbourne	75		8 19.1	+0 3	2 0.24	+ 5.26	+53 59 35.5 +43 6 49.8	9.999325
Meudon		+484	8 18	+04		→ 7.34	-37 38 44.5 -48 36 53	9.999180
Mexico		+19 2 +41 3	_	, ,			+19 18 49.0	
Modena	20 1283	+37 2	9 51 0 17.0 0 25.6	+0 2 +5 4 +9	2 46 7 53.45 0 9.65	+ 3.74 -+-57.15 -+88.74	+44 27 22.2 +44 48 20 +45 18 46.4 +37 9 20.1	9.999277 9.999265 9.999556
Mt. Wilson Calif Moskau MerKr					5 49.13 6 42.23		+34 2 18.0	
Mundenheim ²) München west-Kuppel Nashville (Vanderbilt Obs.) Natal	79 164	+36 -29 5 +40 5	8 45.5 8 58.2 0 46.6 1 45.4	+0 +6 4 -1 1	7 8.78 0 47.61 0 26.38	+ 1.17 +65.84 -11.57 - 0.57	+49 16 7 +47 57 18.8 +35 58 0.9 -29 40 51.3 +40 40 22.3 +46 48 21.5	9.999233 9.999497 9.999648 9.999392
New Haven (Neue Stw.) ³) New York (Rutherfurd) New York (Columb. C.) Nikolajew Nizza Ki. MerKr. ⁴) . Northfield (Goodsell Obs.)	55 378	+40 4 +40 4 -+46 5 -+43 4	3 48.5 5 23.1 8 22.1 3 16.9	+5 4 +5 4 -1 1 +0 2	15.33 19.31.46 19.28.53 14.18.96 14.22.65 16.10.8	+57.42 +57.41 -12.21 + 4.01	+41 7 57.6 +40 32 25.8 +40 34 0.3 +46 46 51.2 +43 31 47.5 +44 16 10.6	9.999384 9.999384 19.999230 9.999335
Oakland Californ. 5). Odessa (UnivStw.) MerKr. Odessa (Filiale Pulkowa) Ogden Utah O-Gyalla (Neue Stw.) 6) Olmütz 7)		- -46 2 - -41 1	8 36.2 8 36.0 3 8.6 2 27.3	-1 -1 +8 2 -0 1	2 41.1 9 27.25 9 27.39 21 34.45 19 10.69	-11.41 -11.41 $+82.40$ -3.15	+37 36 57 +46 17 6.5 +46 17 6.5 +41 1 44.5 +47 40 59.9 +49 24 21	9.999243 9.999239 3.9.999372 9.999204
Ottawa Oxford (Radel. Obs.) Oxford (Univers.) Oxford Mississippi Padua Mauer-Quadr Palermo	65 64 — 31	+45 2 +51 4 +51 4	3 37·3 5 35·4 5 34·2 2 12.6	+5 5 +0 5 +6 5 +0	56 26.73 58 37.4 58 35.2 51 41.9 6 5.65	+58.55 + 9.63 + 9.62 +67.63 + 1.00	+45 12 6.5 +51 34 22.5 +51 34 22.5 +34 11 29.5 +45 12 30.6 +37 55 33.5	7 9.999277 1 9.999111 2 9.999110 7 9.999540 1 9.999268

Seit 1866. Alte Sternwarte 30".1 südlich, 68.2 westlich; 29". — 2) Dr. Max Mündler. —
 Yale University. Alte Sternwarte 45".8 südlich, 18.58 westlich. — 4) Herr R. Bischofsheim. —
 Chabot Observatory. — 6) Dr. von Konkoly. — 7) Herr von Unkrechtsberg.

Name	Sec- höhe	Geog	r. B	reite	vo:		ge erlin ^{Uich}	Korr. der Sternzeit	Geoz.	Breite	Log. p incl. Sechöbe
Paramatta	m	22	18	10.8	1	10	35.4	00.42	220	8 12 0	9-999553
Paris (Obs. nat.) Mer. Cassini	70										9.999183
Paris (Montsouris) westl, Mer.	39										9.999180
Parma (UnivStw.) Turm.		-1-44					16.01				9.999180
Perth WestAustr	60	-31					46.94				9.999202
Petersburg (Akademie)											9.998915
							38.55				
Petersburg (Univers.) .	4	+59	56	32.0	1	7	36.5				9.998914
Philadelphia (Alte Stw.)		-1-39	57	7.5	+-5	54	13.29				9.999404
Philadelphia ¹)		+39	58	2.1	-1-5	54	41.4	+58.27	+39 4	6 42.5	9.99943
Plonsk ²)	-	52	37	40.0	0	2 7	57.1	- 4.59	+52 2	6 33.1	9.999085
Pola	32	44	51	48.6	-0	I	48.16	- 0.30	+44 4	o.81 o ₄	9.999282
Portsmouth		+50	48	3		57	59.6	+9.53	+50 3	6 46	9.999130
Potsdam (Astrophys. Obs.)	07	52	22	56.0	+-0	1	18.94	+ 0.22	52 I	T 47.6	9.999098
Potsdam (Geod.Inst.) Turm							18.68				9.999098
Poughkeepsie ³)		- -4I					8.4				9.999363
Prag (UnivStw.) Turm .		-1-50					5.49			- 0	9.999161
Prag (Safarik)		-1-50					13				9.999148
Princeton N. J. (N. Stw.)							14.33				9.999399
									Ì		
Providence ⁵)							12.42				9.999357
Pulkowa Zentr. d. Stw.							43.78				9.998922
Quebec Canada							24.2				9.999231
Quito	2846						55				0.000194
Riga (Polytechnikum) Turm							53.31				9.998981
Rio de Janeiro	63	-22	54	23.7	-1-3	46	16.32	+37.17	22 4	6 9.7	9.999786
Rochester (Lewis Swift)	172	+43	9	16.8	+6	3	56.67	+59.78	+42	7 47.7	9.999335
Rom (Coll. Rom.) MerKr.		+41					39.44				9.999359
Rom (Capitol) Mer Kr.		+41					38.46				9.999359
Rom (Vatican) Mer Kr.		+41					45.52				9.999362
Rousdon		+50					33.7				9.999143
Rugby		+52									9.999091
St. Louis Missouri							23.95				9.999437
C 17. 1							23.95 24.17				9.999437
San Fernando San Francisco ()											
Santiago de Chile (N. SL.)							17.61				9.999457
Santiago de Chile (A. St.)	519	-33						0 0			9.999596
		-33									9.999603
Scarborough	_	54	10	30	+0	55	13.7	+ 9.07	+54	5 30	9.999045

¹⁾ Flower Obs. (Univ. of Pennsylvania). — 2) Dr. Jedrzejewicz; 1898 nach Warschau verlegt. - 3) Vassar College. - 4) Alte Sternwarte 2".0 nördlich, 18.94 östlich; 65m. - 5) Seagrave; Ladd Observatory, 35" nördlich, 18.57 östlich. — 6) Davidson Observatory.

Name	See- höhe	Geog	r. B	reite		on		ge erlin lich	Ko Ste	rr. der ernzeit	Geoz	z. Br	cite	Log. p incl. Seehöhe
Schwerin	356 44	+50 +42 +49 +59	56 15 18 20	5.2 18.2 55.2 34.0	++++	o 5 0	10 43 19 18	39.70 55.18 49.29 39.18	+++	1.75 56.50 3.26 3.06	+50 +42 +49 +59	44 3 7 10	48.9 50.9 32.0 27.2	9.999061 9.999151 9.999346 9.999168 9.998930
Strafsburg (Prov. Stw.). Strafsburg (N.St.). MKr. ²) Sydney Tacubaya ³) Taschkent Taunton Mass. (Metcall).	161 144 44 2322 457	+48 +48 -33 +19	34 35 51 24	54.0 0.2 41.1 17.5 31.3	++-+	o o 9 7 3	22 22 11 30 43	32.43 30.27 14.80 21.33 35.89	+ + - + -	3.70 3.70 90.55 73.98	+48 +48 -33 +19 +41	23 23 41 17 8	28.5 34.7 2.8 5.8 6.6	9.999°55 9.999197 9.999196 9.999999 9.9994°° 9.999355
Teramo (Cerulli) Tokio		+35 +43 +40 +43	39 39 49 36	17.5 35.9 14 45.3	++++	8 6 0	25 11 51 47	21 23.2 9.49 36.3 43.8	+++	0.22 83.02 60.97 8.48 7.84	+42 +35 +43 +40 +43	27 28 28 37 25	24.0 6.1 51 15.6	9.999363 9.999509 9.999311 9.999382 9.999325 9.999262
Troy N. Y	53 276	+42 +36 +51 +45 +51	43 4 26 4 27	52.9 11.3 47.0 7.9 4.2	+ - + + +	5 7 0 0	48 7 54 22 54	19.4	+ - + + +	57.22 70.26 8.88 3.74 9.00	+42 +35 +51 +44 +51	32 53 15 52 15	24.6 14.6 33·3 37·3 50.5	9.999334 9.999499 9.999118 9.999294 9.999114 9.998916
Urbana Jll	12 	+40 +52 +50 +45 +52	6 5 52 26 13	20.2 9·5 29·3 10·5 5·7	++++	6 0 0 0	46 33 30 4 30	28.77 3.2 14.89 12.68 32.45	++++	66.77 5.43 4.97 0.69 5.02	+39 +51 +50 +45 +52	55 53 41 14	0.0 59·3 12.7 39·9 56.3	9.999400 9.999099 9.999128 9.999102 9.999102
Washington (Alte Stw.) Washington (Neue Stw.) Washington (Kath. Univ.) Wellington (Mt. Cook Obs.) West Point N.Y. (N. Stw.) Whitestone (Field Obs.)	31 44	+38 +38 +38 -41 +41	53 55 56 16 23	38.9 14.0 14.8 47.1 22	+ + + - +	6 6 10	1 1 1 45 49	46.93 50.60 34.8 30.51 25.4	++++-+	59.43 59.44 59.40 106.04 57.40	+38 +38 +38 -41 +41	42 44 45 5	24.3 0.1 0.0 22.6 57	9.999432 9.999430 9.999429 9.999368 9.999383

¹⁾ Alte Sternwarte, 1853 nach Gotha verlegt. — 2) Seit Anfang 1881. — 3) Seit Mürz 1883, früher in Chapultepec. — 4) Dr. Jedrzejewicz; seit 1898, früher in Plonsk. — 5) Seit 1883. Alte Sternwarte 9" nördlich, 18.2 östlich.

472 KOORDINATEN DER STERNWARTEN.

Name	See- höhe	Geogr	: В	reite	V01		ge erlin tlich		r. der nzeit	Geoz	. Breit	e	Log. p incl. Seehühe
Wien (Alte Sternw.)	167	+48°	12	35.5		ΙΙ	56.81	-	1.96	+48°	ı' 8	.0	9.999206
Wien (Josephstadi) 1)		+48							1.94	+48	I 27	- 1	9.999210
Wien (Neue Sternw.) Zentr.		+48								+48			9.999211
Wien (Ottakring) 2)		+48								+48			9.999215
Wien (Mil. Geogr. Inst.)		+48								+48			9.999195
Wien (Techn. Hochschule)		+48								+48	-		9.999196
Wilhelmshaven MerKr.	9	+53	3Ι	52.I	0	20	59.74	+	3.45	+53	20 51	.2	9.999064
Williams-Bay Wisc. 3)		+42											9.999338
Williamstown Mass	:	+42					28.3						9.999335
Williamstown Vict		-37											9.999455
Wilna PassInstr		-1-54											9.999043
Windsor N.S.W.4) .		-33											9.999559
Zô-se China	100	+31	5	48	-7	II	10.0						9.999622
Zürich		+47	-										9.999248
				-									

 $^{^1)}$ von Oppolzers Sternwarte. — $^2)$ v. Kuffner. — $^3)$ Yerkes Observatory. — $^4)$ J. Tebbutt. Neue Sternwarte, o".4 südlich von der alten.

Bahnelemente, Oppositionsangaben und Oppositions= Ephemeriden

der

kleinen Planeten

für

1911.

	1													
Nr. und Name	Opposit	ion	m_{\circ}	()	1	Epoch	e	Mittl.		M			(a)	
THE GIRA HAMIS	1911	Gr.	·	g	und	Oskul	ation	Äqu.		212			447	
I Ceres		_	7.4	4.0	1910	Okt.	20.0	d. Ep.	235	36	22.8	68°	15	57.8
2 Pallas	Nov. 24	7.5	' '	4.5		Nov.		d. Ep.						
3 Juno	(9.5		5.5	1		29.0	d. Ep.						
4 Vesta				4.0	_		1.0°)	d. Ep.						
5 Astraea		9.6	_	6.9	1898			1910.0						
J	, , , , , , , , , , , , , , , , ,							, ,				333		/ 3
6 Hebe	Mai 25	9.2	8.5	5.8	1900	Juli	3.0	1910.0	284	2 0	2 0.I	236	56	30.6
7 Iris			8.4	5.8	1900	Jan.	0.0*)	1900.0	9	5	20.1	141	31	26.9
8 Flora	April 22	9.8	8.9	6.8	1848	Jan.	1.0 [#])	d. Ep.	35	52	49.3	282	38	15.6
9 Metis	Juni 8	9.5	8.9	6.3	1858	Juni	30.0	d. Ep.						
10 Hygiea		8.9	-	5.4	1898	Dez.	20.0	1910.0	291	20	17.9	308	57	0.0
• ,,,											• •			
11 Parthenope .		-			1901			1910.0						
12 Victoria			9.7	7.2	1851		0.0*)							
13 Egeria			9.7	6.7	1850		0.0	1850.0						
14 frene	Nov. 3	10.3	9.7	6.6	1898		1.0	1910.0	180	47	34.9	92	3	45.6
15 Eunomia	Juni 15	9.0	8.6	5.4	1854	Jan.	0.0	d. Ep.	122	5	36.4	93	59	32.5
16 Psyche				5.9	1899			1910.0			33.0			
17 Thetis	-		10.1		1911			1910.0						
18 Melpomene .				6.9			0.0*)	d. Ep.			37.0			
19 Fortuna			-	7.1	1911			1910.0						
20 Massalia	Juni 30	9.9	9.2	6.5	1899	März	29.0	1910.0	76	24	22.5	253	47	7.4
! ! !	1) 1				-0	,		-0		_		6	-6	
21 Lutetia	Febr.17				1853		1	1852.0						
22 Kalliope	Okt. To		9.8		1898			1910.0						
23 Thalia	Sept. 17		10.5		1900			1910.0						
24 Themis			10.8		1905			1900.0						
25 Phocaea		_	10.5	7.9	1898	Aug.	2.0	1910.0	7	21	33.0	88	49	22.7
26 Proserpina .	Nov. TT		TOF	m a	1911	Vav	3.0	1910.0	168	r6	25.2	TOO	27	4 T &
					1873		_	1870.0						
27 Euterpe		TO 8	9.7		1911		6.0	1910.0						
29 Amphitrite .			9.0		1855									
					1890			1870.0						
30 Urania	Marz 17	10.5	9.9	7.4	1090	o um	5.0	1910.0	439	21	40.5	03	41	30.7
31 Euphrosyne.			11.0	6.8	1899	Okt.	15.0	1910.0	327	7	12.2	60	23	44.1
32 Pomona	Juni 22													
33 Polyhymnia.	April 17	12.7	TT 8	8.2	TOOO	Jan	0.0	TOTOO	127	40	57.2	22/1	דד	10.2
34 Circe			11.5					1910.0	288	2.4	27.6	226	54	50.1
35 Leukothea					1910			1910.0	252	24	10.4	200	54	45.6
2) Lenkonier .			14.4	0.3	1910	1767.	10.0	1910.0	~54	54	19.4	209	54	45.0
36 Atalante			12.0	8.6	1899	Mai	8.0	1910.0	170	27	12.1	44	26	46.7
37 Fides	Okt. 22				1911			1910.0						
38 Leda								1910.0						
39 Lactitia	Febr. TO	0.6	0.5	6.0	1807	Jan.		1910.0						
40 Harmonia	Mai 30	0.3	0.2	6.0	1862	Jan.	0.0%							
- The months of	50	ا د،د	9.2	0.19	100/3	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.0		. 00	40	-7.4	20/	-9	

^{*)} Mittlere Elemente.

Ω	i	g.	μ	Log. a	Autoritāt
80° 43′ 47.5	10 36 51.2	4 24 55.5	770.5022	0.4421551	Godward.
172 55 57.8	34 41 59.9	13 47 40.8	768.9075	0.4427550	Farley.
170 50 9.2	13 1 5.0	14 52 43.8	813.0485	0.4265934	Hind.
103 23 20.1	7 8 6.2	5 6 4.4	977.63246	0.3732206	Leveau.
14I 39 24.5	5 20 3.2	11 1 8.5	858.1895	0.4109489	Farley.
38 47 54.7	14 47 59.3	11 35 3.1	939.1860	0.3848366	R. Luther.
60 33 44.3	5 28 1.2	13 20 50.2	962.5828	0.3777123	Riem.
10 17 16.7	5 53 7.3	9 0 54.4	1086.3382	0.3426943	Downing.
68 31 35.2	5 36 0.3	7 5 2.4	962.3390	0.3777857	Lesser.
85 58 13.6	3 48 51.6	6 53 27.8	639.1669	0.4962615	E. Becker.
125 23 31.9	4 37 51.4	5 44 1.0	923.9058	0.3895859	R. Luther.
235 34 41.7	8 23 17.7	12 38 44.9	994.8347	0.3681705	Brünnow.
43 11 37.6	16 32 24.3	4 59 48.7	857.9471	0.4110307	Samter.
87 5 6.2	9 7 32.0	9 20 51.3	851.4287	0.4132389	Maywald.
293 52 33.3	11 44 15.8	10 47 45.6	825.46059	0.4222068	Kamienstschikoft
150 39 24.8	3 4 25.9	7 50 18.3	710.5554	0.4656058	Schubert.
25 8 54.2	5 36 33.4	7 40 4.2	913.55093	0.392849	Maywald.
150 3 49.7	10 9 16.9	12 34 20.2	1020.1198	0.3609036	Schubert.
211 14 7.0	1 32 59.8	9 7 17.0	929.98741	0.387686	Berberich.
206 49 40.3	0 41 7.9	8 17 46.2	949.0005	0.3818268	Küstner.
80 27 48.5	3 5 9.5	9 19 44.6	933-5544	0.3865780	Lesser.
66 41 31.2	13 43 38.1	5 38 34.5	714.4288	0.4640317	Berberich.
67 58 18.4	10 13 3.3		833.5369	0.4193879	Schubert.
35 37 12.3	0 48 2.2	7 49 43.5	641.70063	0.4951161	Krueger.
214 22 20.9	21 36 40.9		954.0992	0.3802754	Berberich.
45 53 56.4	3 35 2.4	4 55 41.9	819.36947	0.424351	P. Neugebauer.
93 51 20.1	I 35 30.4		986.6944	0.3705493	Hoppe.
144 39 14.6	9 23 3.0	0	767.28160	0.443368	v. d. Groeben.
356 40 46.5	6 7 4.6	-	869.0352	0.4073128	E. Becker.
308 25 1.9	2 6 2.7	_	975.3144	0.3739080	Günther.
31 53 23.2	26 28 7.0			0.4981187	Schubert.
220 42 55.2	5 28 49.9	4 45 43.1	852.5880	0.4128449	Lesser.
9 15 35.3	1 55 20.3	19 41 13.8		0.4571134	Newcomb.
184 58 12.9	5 27 21.7			0.4292575	Auwers.
355 9 38.6	8 4 42.7			0.4766605	Tietjen.
359 15 7.6	18 39 44.0			0.4395950	Schubert.
7 56 30.9	3 6 15.8		826.33974		R. Luther.
296 37 59.5	6 57 55.1			0.4379215	Berberich.
157 33 8.6	10 22 6.9			0.4424791	Tietjen.
93 34 54.2	4 15 48.4			0.3555006	Schubert.

(4)							DA	пип	La Pa.	IAT I	NTA.	L I'I	ע	EI
Nr. und Name	Opposit 1911		$m_{\scriptscriptstyle 0}$	g		Epoch Oskul	e ation	Mittl. Äqu.		M			ω	
41 Daphne	Jan. 27	10.1	10.5	7.0	1897	Okt.	6.0	1910.0	338°	8	41.4	41	50	23.8
42 Isis			10.4		1910			1910.0						
43 Ariadne		-	10.0	, ,	1897		_	1910.0						
44 Nysa					1891			1910.0						
45 Eugenia					1890			1910.0						5.7
4) mgema	"(dir 2/5	10.5	10.7	7.3	1090	.101.	14.0	1915.0	100	/	3*./	02	+3	2./
46 Hestia			10.6		1910	Nov.	28.0	1910.0	68	8	1.2	173	7	5.8
47 Aglaja	0kt. 18	10.8	11.2	7.5	1911	Okt.	14.0	1910.0	54	33	57.1	312	3	27.2
48 Doris			10.9		1890	Sept.	13.0	1910.0		3				27.2
49 Pales	Juli 23	10.9	11.0	7.0	1898	März	15.0	1910.0	133		8.6	104	17	27.I
50 Virginia	März 8				1890	Apri	1 6.0	1910.0						
a r. M	1) 70		. 0		-00-					- 6		0		
51 Nemausa			9.8		1889			1910.0						
52 Europa			10.3		1891			1910.0						
53 Kalypso					1911			1910.0						
54 Alexandra			10.9		1884	-	_	1910.0						
55 Pandora	Marz 17	11.5	10.8	7.4	1885	Jan.	22.0	1910.0	263	33	12.6	0	46	56.4
56 Melete	Juni 2	10.0	11.3	8.2	1900	Dez.	30.0	1910.0	157	16	2.5	ioi	6	0.1
57 Mnemosyne					1910			1910.0						
58 Concordia .					1865									14.7
59 Elpis			10.9		1865			1910.0						
60 Echo		_	11.1			Okt.	,	1910.0						
										-				
61 Danae					_	_	l 14.0	1910.0						
62 Erato			12.3		1877			1910.0						
63 Ausonia					-	Febr	-	1910.0						
64 Angelina			10.5			Okt.		1910.0						
65 Cybele	Jan. 28	11.3	11.0	6.4	1909	Dez.	23.0	1910.0	181	16	46.7	95	55	15.9
66 Maja	×_ :		12.2	0.0	1897	Juli	т8.0	1910.0	2.77	2.1	16.т	10	IO	20.0
67 Asia		11.5	11.2		1897			1910.0						
68 Leto					1911			1910.0						
69 Hesperia			10.7		1889			1910.0						
70 Panopaea						Dez.		1910.0						
70 ranopaca .	F GI/1 20	11./	10.9	7.0	1090	170%.	44.0	1910.0	305	41	10.5	454	49	41.9
71 Niobe	Juli 31	10.4	10.7	7.3	1911	Juli	26.0	1910.0	63	22	32.3	265	10	5.5
72 Feronia		_	11.2	8.9	1897	Dez.	25.0	1910.0	166	4	16.3	100	27	8.7
73 Klytia	Juli 16	12.2	12.0	8.8	1898	Aug.	2.0	1910.0						
74 Galatea	März 14	12.9	11.8	8.3	1897	Febr	.28.0	1910.0	148	4	45.2	170	59	36.6
75 Eurydike					1897			1910.0						
76 Freia	Juli 22	T2 6	T2 ()	7 .1	TOTA	hili	60	10100	222	TO	22.0	225	2.4	18 2
77 Frigga	43				1897			1910.0						
78 Diana								1910.0	331	13	26.0	50	51	43.2
79 Eurynome	Many go	11.7	10.0	7.5	1907	Mag	10.0	1910.0	100	4	30.9	149	44	7.9
80 Sappho	мат., 30	11.3	10.5	9.0	1911	Marz	40. 0	1910.0						
on paliting			10.0	0.2	1890	UKL.	11.0	1910.0	19	1.1	20.2	130	54	7.7

Mittlere Elemente

Ω	i	q	μ	Log. a	Autorität
179° 2' 48.7	15 55 33.5	15 26 36.4	770.4586	0.4421715	Berberich.
84 18 9.5	8 33 I.O	12 48 4.4	929.11108	0.3879594	L. Becker.
264 53 57.0	3 27 42.6	9 38 32.6	1084.7577	0.3431159	Prey.
131 22 43.4	3 42 0.7		941.7363	0.3840515	Powalky.
148 15 53.9	6 35 18.5	4 44 11.6	791.0695	0.4345280	Richter.
81 21 7.7	2 17 38.7	9 38 0.9	884.45090	0.4022219	Karlinski.
3 53 57.8	5 0 30.7	7 27 42.2	725.32891	0.459648	P. Neugebauer.
84 50 59.0	6 30 23.4		645.5014	0.4934063	Powalky.
289 50 20.8	3 8 28.3	12 52 28.4	648.4530	0.4920854	Powalky.
73 55 41.5	2 48 27.0	16 45 58.0	823.5561	0.4228757	Powalky.
.76 r 8.9	9 57 11.5	3 51 23.3	975.1593	0.3739540	Berberich.
29 57 19.4	7 26 14.9	6 31 44.8	651.8134	0.4905889	Murmanu.
43 53 57.0	5 8 8.4	11 49 8.2	837.57580	0.417988	Tietjen.
14 2 22.8	11 47 37.5	11 31 49.2	795.5362	0.4328978	Schultz.
11 13 41.5	7 13 26.0	8 18 56.3	774.4612	0.4406713	A. Moeller.
94 10 59.0	8 3 9.4	13 24 5.5	846.1114	0.4150527	R. Luther.
00 4 24.1	15 11 48.8	6 40 10.3	634.42086	0.4984194	Adolph.
61 19 50.3	5 1 50.5	2 26 21.8	799.5964	0.4314238	Oppolzer.
70 58 0.1	8 36 53.1	6 44 2.7	793.9788	0.4334651	Oppolzer.
192 2 8.5	3 35 2.2	10 34 22.7	958.2244	0.3790263	C. H. F. Peters.
334 23 28.2	18 15 3.1	9 29 23.8	688.3554	0.4747959	R. Luther.
126 6 30.1	2 12 15.4	10 6 47.4	642.5659	0.4947260	Oppolzer.
338 6 39.1	5 47 15.9	7 17 58.7	957.1671	0.3793459	Tietjen.
311 1 40.8	1 19 37.6	7 17 59.7	807.9036	0.4284314	Oppolzer.
58 50 52.9	3 28 52.3	5 45 43.0	557.40783	0.5358890	Fritsche.
8 25 31.5	3 5 3.2	10 3 43.4	824.3940	0.422582	Maywald.
03 4 10.5	5 59 10.5	10 47 54.5	942.3560	0.3838611	Frischauf.
44 46 13.4	7 58 31.0	10 46 4.3	765.33084	0.444105	Th. Wolff.
186 49 25.9	8 29 47.6	9 39 2.0	689.6731	0.4742422	Kowalczyk.
48 23 54.9	11 38 23.5	10 22 15.9	838.9960	0.4174978	Richter.
316 23 40.2		10 9 59.7	776.58498	0.439892	P. Neugebauer.
208 2 57.2	5 23 52.3	6 56 42.6	1040.3544	0.3552169	C. H. F. Peters.
7 43 24.2	2 24 17.7	2 34 3.9	816.0117	0.4255401	Powalky.
197 53 4.9	4 0 22.1	13 43 0.6	764.6230	0.4443728	Maywald.
0 6 45.0	4 59 55.9	17 45 42.2	812.4299	0.4268137	Stockwell.
212 4 0.9	2 3 7.8	9 58 25.8	564.54419	0.532206	Murmann.
2 12 17.7	2 27 34.5	7 38 43.5	813.8298	0.4263153	Plath.
333 52 20.2	8 40 20.6	11 51 36.2	835.7718	0.4186116	v. Dubjago.
206 38 50.2	4 35 55.8	10 59 25.5	927.85318	0.388352	Lachmann.
218 49 35.1	8 37 17.6	11 34 29.9	1020.1089	0.3609067	P. V. Neugebauer

				DA	11111	TYTAINTENT	TIV DIVIN
Nr. und Name	Opposition 1911 Gr	m.	g	Epoche und Oskulation	Mittl. Äqu.	M	ω
81 Terpsichore	Juni 4 12.	7 11.8	8 2	1897 Juli 18.0	TOTOO	260 04 03	.60 - 1 - 1
82 Alkmene		11.2		1910 Nov. 28.0			46° 14' 50.5
83 Beatrix		2 11.3		1891 Jan. 11.0		318 1 32.9	106 43 5.1
84 Klio		5 11.3				295 10 0.2	163 24 40.4
85 lo	März 10 11.	_	0.0	1911 März 28.0 1889 Febr.10.0	1910.0	191 50 11.7	12 43 47.9
	man 15 11.	10.9	1.7	1009 1001.10.0	1910.0	160 9 35.1	120 10 17.9
86 Semele	Febr. 23 12.	3 12.4	8.3	1896 Mai 4.0	1910.0	203 38 25.0	300 25 58.4
87 Sylvia	April 22 12.	2 11.9	7.2	1898 April 24.0	1910.0	236 42 47.7	265 34 33.5
88 Thisbe		3 10.8	7.4	1889 Dez. 27.0	1910.0	24 33 30.8	30 50 45.1
89 Julia	Sept. 5 8.	1.01		1889 Dez. 27.0			42 50 18.7
90 Antiope	Okt. 21 11.	4 II.6	7.5	1911 Nov. 3.0	1910.0	64 18 46.0	236 46 30.9
91 Aegina	Juli 20 11.	7 10.8	m n	1805 W.h. 90	TO TO 0		
92 Undina		3 10.9	6.7	1897 Febr. 8.0	1910.0	54 32 0.9	71 55 32.8
93 Minerva		3 10.8	0.7	1904 Febr. 13.0 1897 Jan. 19.0	1910.0	142 28 50.2	220 34 12.4
94 Aurora	'	5 11.3					2 270 52 4.5
95 Arethusa		11.3	7.1	1883 Juli 12.0	1910.0	250 3 4.3	45 22 37.9
		111.3	7.3	1910 Nov. 28.0	1910.0	20 31 41.1	1148 28 54.5
96 Aegle	März 13 10.	7 11.4	7.4	1897 Sept. 16.0	1910.0	182 59 36.0	200 34 30.1
97 Klotho		10.6	7.4	1898 Jan. 14.0	1910.0		264 36 8.8
98 Ianthe	_ _	12.7	9.4	1894 Jan. 15.0	1910.0		154 49 36.4
99 Dike	<u> </u>	14		1868 Juni 5.0		350 36 11	198 52 56
100 Hekate	Juni 9 11.	111.9		1898 Jan. 14.0			176 49 53.2
101 Helena		10.7	76	1897 Aug. 27.0	TOLOGO	8 =6 08 :	
102 Miriam		7 12.6	,	1898 Juli 13.0			343 58 24.2
103 Hera		5 10.2		1897 Febr. 8.0	1910.0		
104 Klymene	_	9 12.2		1897 Dez. 25.0			185 58 53.7
105 Artemis		I II.I		1897 Aug. 27.0			20 0 49.1
			0.5	1.09/ 11118. 27.0	1910.0	09 55 41.6	54 43 20.1
106 Dione		2 11.3	7.2	1910 Febr. 21.0	1910.0	108 23 21.0	324 54 49.2
107 Camilla		4 11.2	6.5	1891 April 21.0	1910.0	97 7 57.4	4 293 57 59.6
108 Hecuba		7 11.7	7.4	1911 Sept. 24.0	1910.0	159 37 59.	5 172 26 42.4
109 Felicitas		8 12.0	8.7	1898 Jan. 14.0	1910.0	115 33 32.	5 52 23 6.6
110 Lydia	April 25 10.	7 10.5	7.1	1901 Febr. 13.0	1910.0	150 32 10.	1 281 13 26.2
III Ate	Juni 3 11.	7 11.3	8.2	1890 Jan. 16.0	10100	01.26	1 160 04 48 8
112 Iphigenia .	Mai 24 11.	5 11.5	8.8	1897 Dez. 25.0	1010.0	91 20 4 88 12 TI	1 14 7 51 7
113 Amalthea .	Jan. 30 10.	8 11.0	8.4	TOTT Febr. 6.0	1010.0	201 2 26	8 76 20 410
114 Kassandra .	Okt. 2 11.	6 11.1	7.8	1889 Sept. 18.0	1010.0	211 20 2	1 248 48 200
115 Thyra			7.8	1897 Okt. 6.0	1910.0	340 57 26.	1 04 2 28 0
116 Sirona	Mai 25 10.	0 10.7	7.3	1889 Juni 10.0	1910.0	158 3 13.	7 89 6 38.1
117 Lomia		5 11.4	7.5	1897 Okt. 6.0	1910.0	332 35 55	4 48 38 20.1
118 Peitho	Juni 19 11.	7 10.8	8.1	1911 Juli 6.0	1910.0	196 18 53.	3 31 17 7.0
119 Althaea	Nov. 6 10.	1 10.6	7.5	1898 Aug. 2.0	1910.0	314 33 34.0	0 168 24 50.1
120 Lachesis	Mai 4 11.	4 11.7	7.6	1897 Nov. 15.0	1910.0	202 19 20.	3 238 31 10.8

Ω	i.	q	μ	Log. a	Autoritāt
2 34 20.8		TO 11 500	ma6"4106	0.4552569	Maywald.
	7 55 5.5	12 11 52.3	736.4126	0.4414891	W. Luther.
26 34 35.4	2 51 1.9	12 44 1.4	772.27663	0.3858476	E. Becker.
27 47 22.4	4 59 49.4	4 51 24.3	935.9122		P. Neugebauer.
327 32 15.6	9 21 58.9		977.79374	0.373173	
203 55 21.1	11 53 47.5	11 10 33.7	821.0524	0.4237571	v. d. Groeben.
88 2 1.0	4 47 35.9	12 46 53.6	650.4530	0.4911939	Riem.
75 15 57.6	10 53 1.7	5 26 44.5	545.3288	0.5422321	v. d. Groeben.
277 51 59.5	5 14 54.8	9 26 6.4	771.1774	0.4419015	Kowalczyk.
312 0 55.5	16 12 32.0	10 33 29.3	871.5645	0.4064714	Th. Wolff.
70 49 29.1	2 15 27.9	8 47 5.7	632.48240	0.499306	Maywald.
11 4 13.0	2 8 25.1	6 7 10.0	850.8763	0.4134268	Heuer.
102 50 42.0	9 56 23.7	5 22 41.6	622.67957	0.5038280	Anderson.
5 4 31.2	8 35 28.0	8 1 55.7	775.6316	0.4402341	P. Lehmann.
4 33 17.4	8 4 18.6	4 44 18.3	630.6584	0.5001416	Leppig.
244 5 29.9	12 55 44.5	8 53 6.5	661.08804	0.4864982	Schur.
11 3 22					
322 47 10.3	16 2 24.5	7 39 35.3	663.1502	0.4855965	Schulhof.
160 57 9.4	11 45 29.3	14 51 9.7	813.5778	0.4264050	Maywald.
354 2 7 5. I	15 33 47.6	10 49 11.3	805.3086	0.4293629	Riem.
42 17 51	13 53 30	13 47 30	758.662	0.44664	Loewy u. Tisserand.
128 26 39.4	6 23 7.5	9 31 58.5	653.5823	0.4898043	Stark.
343 42 52.6	10 10 32.8	8 1 10.2	854.8620	0.4120737	v. d. Groeben.
211 39 13.0	5 5 24.5	14 44 31.2	817.8380	0.4248929	C. H. F. Peters.
136 26 1.5	5 24 33.0	4 30 21.3	798.0990	0.4319665	Leveau.
43 13 29.2	2 52 54.6		632.5948	0.4992540	Berberich.
188 14 55.0	21 30 55.0	10 6 59.0	970.4600	0.3753527	A. Leman.
63 10 51.0	4 35 55.0	9 14 4.3	625.17474	0.5026701	Berberich.
176 14 1.0	9 51 39.6	3 56 39.0	544.1827	0.5428412	Matthiessen.
352 27 26.5	4 23 34.1	6 I 26.9	617.91149	0.506054	Schulhof.
4 42 21.8	8 I I.3	17 12 53.0	799.9088	0.4313108	v. d. Groeben.
57 14 3.9	5 59 12.9	4 32 38.7	785.37505	0.436620	Sternberg.
		0			11.1.4.1.2
306 39 51.1	4 56 20.2	5 58 35.2		0.4137349	Holetschek.
324 13 23.0	2 37 9.3	7 25 29.0	934.8048	0.3861905	Tietjen.
123 18 26.4	5 2 18.1	5 0 34.9	969.12035	0.3757526	W. Luther.
164 40 55.6	4 53 53.8	7 55 32.6	810.5220	0.4274945	Anton.
309 19 50.6	11 35 36.3	11 5 7.8	966.3219	0.3765898	Watson.
64 42 11.5	3 35 10.3	8 3 59.9	770.3736	0.442203	H. Oppenheim.
349 41 19.0	14 56 21.2	1 31 51.9	40	0.4761187	Tietjen.
47 40 5.0	7 46 40.4	9 27 2.0		0.386819	Holetschek.
203 58 4.8	5 44 15.8	4 42 49.9	855.7364	0.4117777	Berberich.
342 45 48.8	7 0 16.6	3 30 1.0	645.4399	0.4934339	Plath.

Nr. und Name	Opposit		m.	g	Epoche	Mittl.	М		m	
	1911	Gr.		.,	und Oskulatioi	Äqu.				
**										
121 Hermione					1910 April 22.0					
122 Gerda		11.2	,		1911 Mai 7.0	1910.0	24 32 10.8	3 11	7	46.8
123 Brunhild			11.8	8.5	1898 Juni 23.0	1910.0	210 35 25.0	122	14	17.2
124 Alkeste			10.3	7.1	1890 Dez. 2.0	1910.0	180 26 7.9	58	14	32.3
125 Liberatrix	Febr. 15	11.4	11.2	7.8	1897 Jan. 19.0	0.0101	202 46 5.6	104	32	55-5
126 Velleda	_		11.5	8.8	1899 Dez. 15.0	0.0101	81 58 56.4	325	47	25.0
127 Johanna				7.1	1890 Okt. 3.0	1910.0	251 23 46.9	90	26	21.5
128 Nemesis					1897 Jan. 19.0		144 20 2.5	2.400	21	0.1
129 Antigone			10.3		1897 Jan. 19.0		253 10 00	103	12	26.2
130 Elektra			10.6		1898 Aug. 22.0		337 5 55-3	3:233	46	1.6
131 Vala	Juni 10	тт.8	12.2	0.5	1898 Dez. 20.0	10100	288 27 28	155	-6	0.1.7
132 Aethra		_	10.9	80	1895 Nov. 30.	1910.0	330 47 37.	1 155	50	-6.0
133 Cyrene		тт.8			1898 Jan. 14.0		280 4 53.	1 282	14	50.3
134 Sophrosyne.		-	11.1		1910 Okt. 19.0		200 4 53.4	1 203	57	33.7
135 Hertha			10.5		1898 Okt. 1.0		317 14 38.0	02	13	40.4
							33 3 56.:			
136 Austria				8.9	1898 März 15.0	1910.0	211 14 20.	130	28	54.5
137 Meliboca				7.7	1898 Nov. 10.0	1910.0	80 12 0.8	3 105	35	51.7
138 Tolosa		12.6	11.8	9.1	1896 Febr. 14.0	1910.0	190 23 49.0	258	3	38.4
139 Juewa		11.6	10.9	7.4	1898 Nov. 30.0	1910.0	299 0 11.9	162	8	50.0
140 Siwa	Dez. 33	12.4	11.4	8.0	1898 Okt. 1.0	1910.0	173 35 23.	193	12	17.2
141 Lumen	Mai 6	12.3	11.4	8.2	1890 Aug. 24.0	0.0101	321 2 54.	7 5.1	Т2	25.4
142 Polana					1896 Dez. 10.0	0.0101	211 12 17.	280	58	40.0
143 Adria			12.4	9.0	1891 Okt. 18.0	0.0101	160 45 41.3	248	17	46.T
144 Vibilia	-		10.7	7.5	1888 Juli 18.	0.010	280 54 28.0	200	45	10.7
145 Adeona	Sept. 10			8.1	1898 Aug. 22.0	1910.0	240 12 41.	7 40	33	3.5
146 Lucina	Juni 27	то 8	11.1		1898 Aug. 2.					
147 Protogencia.		_	12.5	8.4	1898 Sept. 11.	1010.0	09 1 10.	2 140	57	30.7
148 Gallia	Juni 5		11.0	7 5	1910 April 2.	1910.0	340 52 50.	122	45	45.0
149 Medusa	J			7.3	1910 Juli 31.	1910.0	135 1 22.	3 251	2	43.2
150 Nuwa			11.6	7.7	1893 März 1.	1910.0	155 36 25.	1 249 3 146	52 41	9.4
151 Abundantia	Mai 20	11.8	11.9	8.8	1898 März 15.	1910.0	9 18 20.	130	21	2.4
152 Atala	Marz 31	12.3	12.2	8.1	1899 Jan. 29.	1910.0	27 31 7.	42	37	0.7
153 Hilda	Marz 28		12.6	7.3	1911 März 28.	1910.0	285 17 29.	54	13	51.1
154 Bertha		_	11.2	7.0	1910 Dez. 18.	1910.0	260 14 33.	5 164	40	8.3
155 Scylla	_		13.5	9.8	1875 Nov. 8.	1910.0	339 4 47	39	9	57
156 Xanthippe .	Nov. 5	12.4	11.3	7.9	1903 Jan. 29.	1900.0	210 16 9	1 334	33	43.4
157 Dejanira	Juli 19	14.7	13.7	10.6	1904 Nov. 17.	5 1904.0	330 35 43.	9 45	39	12.1
158 Koronis	April 9	12.6	12.3	8.7	1898 Aug. 22.	1910.0	278 50 53.	3 138	43	15.9
159 Aemilia		12.6	12.3	8.2	1897 Dez. 5.	1910.0	324 40 17.	3 331	52	54.3
160 Una		-	11.8	8.4	1897 Dez. 25.	1910.0	33 30 8.	8 46	47	30.1

					(")
Ω	i	φ	μ	Log. a	Autorität
75° 41′ 3.6	7° 33′ 28.8	8° 15 19.1	555.12285	0.5370783	Berberich.
178 46 22.6	I 36 36.0	3 11 10.4	614.37381	0.507714	Lange.
308 38 28.5	6 25 27.6	7 1 21.7	802.5894	0.4303421	Berberich.
188 37 15.4	2 55 29.2	4 27 41.2	832.2976	0.4198186	Hall sen.
169 36 18.8	4 37 57.0	4 29 45.0	780.9349	0.4382611	Lange.
109 30 10.0	4 3/ 3/.0	4 ~9 +5.0	/00.9349	0.4302011	min ₆ c.
23 27 7.7	2 56 26.5	6 3 52.3	931.5192	0.3872099	Heuer.
31 53 43.8	8 15 42.7	3 47 29.9	775.8987	0.4401344	Maywald.
76 45 7.8	6 15 8.3	7 13 52.8	778.9624	0.4389934	de Ball.
137 58 12.8	12 10 1.8	12 15 18.0	730.5585	0.4575677	Austin.
146 16 41.6	22 58 1.8	12 29 21.9	646.4298	0.4929901	Powalky.
65 37 21.8	4 57 49 1	2 51 52 5	935.8550	0.3858654	Berberich.
260 11 30.0	4 57 47.1	3 51 52.5 19 21 13.8	903.6882	0.3959920	W. Luther.
321 25 52.7	23 32 20.0	8 2 47.1	662,6045	0.4858348	v. d. Groeben.
346 13 52.6	7 13 50.2	6 42 22.6	864.45983	0.4088412	Maywald.
344 13 36.6	2 18 34.4	11 45 17.6	937.0637	_0.3854917	Maywald.
3+4 13 30.0	2 10 34.4	13. 45 17.0	937.0037	= 0.303491/	may ward.
186 20 58.5	9 33 12.0	4 52 0.8	1025.7532	0.3593092	H. Oppenheim.
203 47 40.2	13 21 7.8	12 46 22.0	645.4607	0.4934245	Lange.
54 53 56.5	3 13 22.0	9 16 35.8	924.9117	0.3892709	v. d. Groeben.
2 33 1.8	10 55 19.7	9 57 48.4	764.0768	0.4445797	Berberich.
107 14 12.9	3 11 29.4	12 31 19.9	786.6737	0.4361413	v. d. Groeben.
319 28 26.5	11 58 39.3	12 16 57.4	814.6615	0.4260196	Berberich.
292 1 39.9	2 14 29.1	7 44 10.6	943.5246	0.3835023	L. Becker.
333 54 46.0	11 30 13.3	4 8 20.2	773.3958	0.4410699	von Haerdtl.
77 1 15.3	4 48 16.9		819.4849	0.4243104	Powalky.
77 55 52.9	12 41 10.3		812.2212	0.4268882	Tietjen.
	0.0		. 00		D. 1.1
84 26 43.8	13 5 8.8	3 39 14.6	791.4186	0.4344003	Berberich.
251 21 33.7	1 54 15.5	2 2 8.6	638.8069	0.4964247	L. Becker.
145 15 21.7	25 19 6.9		767.77183	0.4432035	L. Becker.
158 47 35.8	0 55 46.4	3 52 47.6	1106.37588	0.3374026	Lange.
207 50 0.6	2 8 18.4	7 20 7.3	689.2534	0.474418	H. Oppenheim.
39 1 12.0	6 28 21.2	2 10 51.3	850.1245	0.4136827	Riem.
41 25 0.5	12 13 21.2	4 12 12.4	637.2942	0.4971111	Lange.
228 20 11.4	7 51 56.0	9 19 1.0	449.45588	0.598213	Kühnert.
37 7 16.3	20 58 23.8	5 2 23.5	624.40618	0.5030263	Anton.
43 20 30	14 4 31	14 49 28	713.7875	0.464292	Schulhof.
242 42 10 2	0.00 18	12 55 212	H8= 68=9	0.106505	Ebell.
242 43 10.3		12 55 24.2	785.6858	0.436505	
62 9 28.7	12 5 20.1	11 30 39.9	856.508	0.411518	Sternberg.
281 12 13.9	1 0 0.7	3 17 38.9	730.4848	0.4575969	Maywald. Berberich.
135 12 3.7	6 4 55.0	5 37 45.9	647.4107	0.492551	P. Neugebauer.
9 24 54.3	3 51 22.4	3 45 8.1	787.7290	0.435753	1. Actigenanci.

(10)					DA.	111111		
Nr. und Name	Oppositi 1911	on Gr.	m_s	g	Epoche und Oskulation	Mittl. Äqu.	М	ω
161 Athon		_	0.11	8.4	1896 Dez. 30.0	10100	142° 20' T.6	201 48 24 2
161 Athor			12.3		1899 Sept. 6.0			
163 Erigone			12.3 11.5	9.0		1910.0	215 30 54.3	1205 20 18 5
164 Eva	Dog TA	- 1	11.5	8.3	1910 Juni 1.0			
					1897 April 9.0			
105 Loreley	Dez. 29	11.5	11.1	7.0	109/ April 9.0	1910.0	290 21 20.7	344 30 14.7
166 Rhodope	Juli 18	12.3	12.5	9.2	1897 Juni 8.0	1910.0	213 52 27.9	261 28 49.8
167 Urda	Dez. 19	13.2	13.0	9.4	1898 Jan. 14.0	1910.0	197 17 5.7	121 7 43.9
168 Sibylla	April 21	12.0	11.6	7.1	1899 Mai 29.0			
169 Zelia	März 17	11.9	11.3	8.8	1890 Aug. 4.0	1910.0	328 I 8.3	332 10 48.8
170 Maria	Juli 2	12.0	11.7	8.7	1910 März 13.0	1910.0	66 0 9.6	156 19 5.9
171 Ophelia	N5 26	116	TO 7	80	1807 Okt 60	TOTOO	226 0 777	FO 05 00 T
171 Opnena			10.4					
172 Batters			11.0			1010.0	71 12 10 6	330 40 20.3
174 Phaedra					1807 Okt 60	1010.0	71 13 19.0	1 286 21 180
			12.3		1908 Jan. 3.0			
1/5 Andromache	Jun 4	11.4	14.5	0.0	1900 """. 3.0	1910.0	110 44 33.0	302 2/ 21.5
176 Idanna								
177 Irma	Febr. 6	12.7	12.4	9.0	1897 Jan. 19.0	1910.0	71 42 48.0	33 16 9.9
178 Belisana	Aug. 5	11.8	12.0	9.2				
179 Klytæmnestra		11.8	11.5	7.7	1897 Okt. 6.0	1910.0	14 32 37 3	3 100 30 2.0
180 Garumna	Juli 18	14.1	13.3	9.9	1899 Nov. 5.0	1910.0	308 53 34.0	5 169 12 38.1
181 Eucharis	Febr 6	TO 4	11.5	7.1	1887 Okt. 19.0	10100	205 40 261	6 310 26 20.5
182 Elsa		10.4	11.0		1897 März 20.0			1 308 16 41.4
183 Istria								2 262 21 44.2
184 Dejopeja :			12.4		-	-		1 217 10 44.9
185 Eunike					_	-		3 221 34 37.8
						-		
186 Celuta								
187 Lamberta			11.4					1 192 2 46.6
188 Menippe			13.0			_		2 66 36 36.3
189 Phthia			20					2 166 0 10.0
190 Ismene			12.0	6.7	1910 Nov. 8.0	1910.0	327 17 17.	8 286 44 42.4
191 Kolga	Mai 4	12.5	12.0	8.3	1897 Juli 18.0	1910.0	271 52 28.	4 224 21 12.1
192 Nausikaa		_	9.3	6.7	1888 Juli 25.0	1910.0	324 20 18.	4 27 40 24.5
193 Ambrosia					1879 März 25.5			
194 Prokne					1899 Jan. 29.0			
195 Eurykleia								
rob Philamala	lan TC	TO 6	10.0	60	LOOT Amil and	1010.0	240 25 11	6 207 TO 45 5
196 Philomela	Juni 24	10.0	12.5	0.3	1901 April 9.0	1910.0	124 40 25 11.	5 242 28 47 4
197 Arete 198 Ampella	Jun 24	12.0		9.3	1900 Juli 24.0	1910.0	134 40 9.	5 88 1 130
198 Ampena					1909 Nov. 13.0			
200 Dynamene	Sept Tr	10.8	17.4	7.0	1888 Juli 25.0	1910.0	277 46 22	4 171 8 9.7
	1 × 1/10 × 2	10.0	1 * * . 3	11.9	2000 7111 25.0	1910.0	/ *// 40 2 3.	8 82 43 1.3

				_						
	Ω		i			F		μ	Log. a	Autorität
18"	48 52.5	9°	3 17.	7	7" 5	57 3	23.4	967.0645	0.3763675	Tietjen.
38	16 1.8	6	5 - 6.	0 :	0 3	3 I	5.3	676.5719	0.4797951	Tietjen.
160	15 7.2	4 -	₄ 6 38.	3	1	1	54.I	974.2162	0.3742342	Berberich.
77	25 24.6	24 2	20 38.	I 2	0 2	22	0.7	830.75127	0.4205237	Richter.
304	11 19.1	11	12 5.	0	3 5	54	10.6	641.1299	0.4953737	Samter.
129	39 2 7.9	12	I 54.	8	2, 1	13	13.9	806.7683	0.4288385	Richter.
166	38 10.8	2	10 45.	6	I 5	59	3.7	736.5954	0.4551851	Lange.
209	23 56.1	4 3	36 6.	5	4 2	21	54.0	571.6864	0.5285658	v. d. Groeben.
	58 8.5	5 3	30 51.	2	7 3	31	33.7	979.6462	0.3726249	Richter.
	23 56.1	14 2			3 3	38	8.4	868.72749	0.4074153	Lange.
ioi	3 53.7	2 :	33 12.	1	6 :	38 :	28.6	636.3859	0.4975241	Berberich.
332	11 35.0	10	2 10		6 :	32	18.8	965.9899	0.3766893	Berberich.
148		14	15 36.	8	11 9	51 .	44.6	780.8co6	0.4383110	Breka.
328	48 32.4	12	6 32	9	8 2	23 .	13.8	734.0156	0.456201	H. Oppenheim.
	26 12.4	3	10 33	3	I	4	20.9	611.29468	0.5091706	Berberich.
200	57 12.2	22 .	43 20	2	0.	16	21.6	628.26359	0.5012431	P. Neugebauer.
349		1	26 55	3	[3 :	32	58.0	768.8406	0.4427802	Richter.
51	1 8.7		54 28				36.4	919.16707	0.3910715	Berberich.
	20 50.4		47 52				0.0	692.8578	0.472908	H. Oppenheim.
314			53 40				17.7	790.4612	0.4347507	v. d. Groeben.
145	7 22.1	18	35 23	6	1.2	40	26.5	643.5438	0.4942856	de Ball.
T06	46 38.9	2	10 9	.I	10	50	51.9	944.5132	0.3831990	Samter.
	54 44.3	26	2 5 59	.5	20	27	8.2	760.4634	0.4459522	Petrelius.
	48 39.4	1	9 53	4	3	28	22.0	622.48092	0.5039204	Thraen.
154	3 8.4	23	14 21				14.1	782.8522	0.4375512	Bauschinger.
14	43 53.5	13	JJ 1I	.6	8	4 I	21.3	977.5884	0.3732337	Tietjen.
	22 32.4		41 24		13	36	43.5	785.6152	0.4365311	A. Leman.
241	56 25.8	II	44 36	.3	10	15	2 8.9	772.712	0.441326	Coniel.
203	32 11.1	5	8 54	.2	2	4	18.4	924.2246	0.3894861	H. Oppenheim.
177	0 17.4	6	8 17	.0	9	38	10.0	453.68733	0.5955000	Küstner.
159	59 7.7	11	29 25	.6	5	13	5.0	720.0541	0.4617609	L. Becker.
	33 25.4		51 40		14		22.7		0.3807762	Lange.
	40 33.1		38 46		-		52.0	0 0	0.410913	A. Leman.
	29 8.2	18		.9			55.7		0.4174465	Tietjen.
	52 26.6			.8			31.9		0.4589623	Riem.
73	27 31.0	7	17 1	.5	I	13	48.1	646.0377	0.4931658	P. V. Neugebauer.
	10 10.5		49 20						0.4376261	Lange.
	24 5.6		18 6				54.7		0.3907974	v. d. Groeben.
	40 27.7		24 49	-			43.7		0.5000789	Tietjen.
	35 38.5		54 46						0.4372741	Bauschinger.

Nr. und Name	Opposit		m_{\circ}	g		poche		Mittl.		M			ω	
	1911	Gr.			und	Oskulati	ion	Aqu.						
										,			,	
201 Penelope	1		11.9	8.6	1897	Nov. I	5.0	1910.0	53	I	33.0	177	43	4.8
202 Chryseïs			10.7	6.7	1896	Nov. 2	0.0	1910.0	296	12		355	17	24.9
203 Pompeja	Nov. 12	11.3	11.7					1910.0			8.5			33.1
204 Kallisto		_	12.0			Nov.	2.0	1910.0	140	55	19.4			26.1
205 Martha	Sept. 5	12.5	12.7	9.2	1886	Febr.2	6.0	1910.0	139	40	10.2	172	8	41.4
206 Hersilia	Nov. 6	11.8	12.0	8.6	1887	Juni 2	1.0	1910.0	184	57	36.2	300	24	35.6
207 Hedda	_		11.8			${ m Febr}_*$								
208 Lacrimosa	März 14	12.I	12.1			Nov. 2		1910.0						
209 Dido			11.5			Dez. 2		1910.0						
210 Isabella		_	12.5			Okt. 2		1910.0	358	48	23.3	10	17	39.2
211 Isolda	Dez. 25	10.5	11.5	7.5	1895	Nov. 2	6.0	1910.0	1	10	15.0	170	41	36.4
212 Medea		_	12.2			Juli 2								
213 Lilaea		_	11.7			Febr.2		1910.0						
214 Aschera		12.3				April		1910.0			59.3			
215 Oenone			12.7		- 1	Nov.	-	1910.0			48.8			
216 Kleopatra		_	10.1	6.6	1886	Juni 2	6.0	1910.0	277	Q	56.8	176	ΙΙ	54.3
217 Eudora			13.1					0.0101			1.8			
218 Bianca								1910.0			34.6			
219 Thusnelda .			11.2					1910.0						
220 Stephania				11.0	1887	Jan.	0,5	1910.0	131	12	41.6	75	_	33.9
221 Eos	Non 6	** *												
								1910.0						
222 Lucia				0.0	1898	Jan. 1.	4.0	1910.0	225	34	56.4	175	52	41.3
223 Rosa						Dez. 1		1910.0						
224 Oceana		_	11.7			Febr		1910.0	225	24	48.8	276	55	27.0
225 Henrietta	_	_	12.7	8.2	1903	Nov.	5.0	1910.0	88	4 I	26.8	97	37	49.8
226 Weringia					1891	Aug. 1	9.0	1910.0	30	52	14.2	150	8	45.9
227 Philosophia.						Dez. I		1910.0	283	51	33.6	254	29	42.9
228 Agathe		14.5	14.5	12.4	1892	Nov. 2	1.5	1910.0			10.8			
229 Adelinda	Febr.28	14.2	13.5	8.9	1901	Aug. 2	7.0	1910.0	3	50	29.2	303	1	51.4
230 Athamantis.	Juli 2	10.3	10.3	7.7	1897	Okt. 2	6.0	1910.0			17.7			
231 Vindobona .		11.4	12.4	8.6	1898	Nov. I	0.0	1910.0	164	53	38.2	263	38	46.4
232 Russia	_	_	13.4	10.4	1901	Sept. 1	6.0	1910.0	159	56	8.4	48	35	13.8
233 Asterope	Dez. 31	11.5	11.3	8.1	1897	Aug. 2	7.0	1910.0	353	18	46.2	122	35	34.5
234 Barbara	Febr. 7	12.9	11.7	9.1	1898	Okt. 2	0.1	1910.0	33	57	10.0	190	6	58.4
235 Carolina	Juli 7	11.8	12.2	8.5	1897	Sept. 1	6.0	1910.0	73	32	29.3	207	24	29.7
236 Honoria	Jan. 27	12.0	11.4	7.9	1890	Aug. 2	0.5	1910.0	341	11	56.1	170	30	20.7
237 Coelestina	April 5	12.8	12.8	9.4	1897	März 2	0.0	1910.0	258	3	0.9	196	24	38.6
238 Hypatia	Jan. 7	11.6	11.7	8.0	1900	Dez. 1	0.0	1910.0	54	45	6.4	207	2	40.9
239 Adrastea	_ ′		14.0	10.2	1900	Dez. I	0.0	1910.0	26	22	21.4	206	I	9.0
240 Vanadis		_	12.5	9.3	1901	Juli 1	8.0	1910.0	262	20	34.2	208	17	15.6
			ر	7.3	, , ,			320.0	404	-	24.2	790	*/	- 5.5

Ω	i	g	μ	Log. a	Autorität T
157 17 30.2	5° 43′ 18."9	10 25 23.2	809.8362	0.4277396	Bauschinger.
137 54 25.3	8 49 26.9	5 51 45.4	659.4551	0.4872142	Berberich.
348 46 39.6	3 12 20.0	3 28 23.6	783.8637	0.4371774	Berberich.
206 2 34.8	8 17 3.5	9 51 34.4	812.2343	0.4268835	Palisa.
212 34 39.7	10 39 53.8	I 54 54.4	765.9190	0.4438825	Küstner.
145 33 33.3	3 45 25.4	2 19 59.5	782.3554	0.437735	Stechert.
29 5 52.3	3 49 3.8	1 39 3.3	1027.9888	0.3586788	Richter.
5 25 26.9	1 47 15.0	0 54 11.9	721.0639	0.4613553	Berberich.
2 8 19.7	7 14 33.2	3 46 48.4	636.9842	0.4972519	Bauschinger.
33 11 5.1	5 18 10.8	7 6 30.8	790.0977	0.4348838	Berberich.
265 28 46.4	3 52 0.2	9 15 38.8	668.6056	0.4832244	Bauschinger.
315 15 56.5	4 16 54.7	6 40 42.2	647.3973	0.4925571	L. Becker.
122 36 4.4	6 46 27.7	8 19 49.1	777.0010	0.4397233	A. Leman.
342 41 30.4	3 27 38.3	1 55 49.3	841.5265	0.416626	Tietjen.
25 28 14.6	1 43 23.1	2 1 15.5	771.4115	0.4418137	Bauschinger.
216 8 54.0	13 2 22.4	14 31 20.7	759-7703	0.4462162	Knopf.
164 9 28.1	10 15 31.0	17 38 25.1	727.0438	0.4589640	Richter.
171 10 12.2	15 12 11.0	6 36 19.6	814.9375	0.4259216	Bauschinger.
201 5 2.9	10 47 16.8	12 54 38.9	982.2924	0.3718439	Darmer.
258 52 26.3	7 34 13.7	14 53 43.7	984.634	0.371154	Bidschof.
142 45 34.4	10 50 59.6	5 34 47.1	677.3539	0.4794607	Bauschinger.
80 28 19.6	2 10 46.9	8 27 39.8	641.7676	0.4950859	Berberich.
48 48 2.4		6 57 0.4	652.9855	0.4900687	Bauschinger-
353 39 57.4	5 52 27.9	2 25 51.0	824.6755	0.4224824	S. Oppenheim.
200 52 24.6	20 41 56.1	15 18 16.8	567.5897	0.530647	Cerulli.
135 39 6.7	15 49 30.5	11 43 4.3	793.2109	0.433745	Kreutz.
331 9 43.9	9 15 0.1	12 2 39.9	637.0300	0.4972311	Lange.
313 44 55.4	2 33 21.6	13 55 0.2	1086.2400	0.3427205	Kreutz.
30 51 11.2	2 9 17.4	8 9 53.2	562.4884	0.5332620	Berberich.
239 53 16.0	9 25 11.6	3 32 52.8	964.9093	0.3770134	Richter.
352 24 25.6	5 8 18.5	8 56 36.2	711.1049	0.4653820	Lange.
152 33 31.6	6 4 17.4	9 51 22.1	869.5956	0.4071263	v. d. Groeben.
222 40 10.4	7 39 4.5	5 49 43.8	817.9445	0.4248552	Knopf.
144 25 8.3	15 21 14.2	14 7 1.5	962.6609	0.3776889	Tietjen.
66 42 2.0	9 4 3.2	3 31 18.9	725.2712	0.4596708	Tietjen.
186 49 0.9	7 36 48.4	10 54 45.4	758.1024	0.446853	Bidschof.
84 44 24.1	9 45 48.7	4 I 30.3	771.8775	0.4416388	Schwarz.
184 35 15.0	12 23 12.7	5 10 15.7	715.9041	0.463434	Berberich.
181 39 47.0	6 9 4.0	13 26 21.7	693.1222	0.472798	Berberich.
114 55 52.6	2 5 52.9	11 54 32.0	814.7587	0.4259851	Berberich.

	Opposit	ion			Ei	—— — poche		Mittl.						
Nr. und Name		Gr.	$m_{_{\mathrm{n}}}$	g)skulat	ion			M			ω	
	/							1						
241 Germania	Okt. 30	10.8	11.2	7.2	1911	Nov.	3.0	1910.0	41	55	14.2	76°	8	22.4
242 Kriemhild.				9.0	1889	Dez. 2	27.0	1910.0	307	49	54.4	274	28	16.5
243 Ida								1910.0						
2.14 Sita	Jan. 5	13.7						1910.0						
245 Vera								1910.0						
246 Asporina													-	7.1
247 Eukrate													-	32.2
248 Lameia					1905									34.4
249 Ilse														30.4
250 Bettina	Aprii30	11.0	11.5	7.3	1897	701.	15.0	1910.0	332	3	32.7	00	3	47.2
251 Sophia	Juni 20	14.2	13.6	9.6	1902	Nov.	10.0	1910.0	335	39	10.4	288	20	55.2
252 Clementina .					1901			1910.0						
253 Mathilde					1901			1910.0						
254 Augusta		-			1887			1910.0						
255 Oppavia	Nov. 20	13.9	13.8	10.4	1890	Jan.	16.0	1910.0	336	40	35.6	149	6	36.3
276 Walsunge	Ion T	10.5	10.0	0.0	1006	12 slow	2.0	10100	254	22	2T T	40	28	0.7
256 Walpurga					1900			1910.0						9.I
257 Silesia					-	•		1910.0			49.5			6.8
258 Tyche					1904			1900.0						
259 Aletheia 260 Huberta					1899		_	1910.0			1.9		-	
200 IInberia	JIII 14	13.5	13.9	9.4	1900	Dez.	10.0	1910.0	92	3	1.9	103	50	5.7
261 Prymno	Nov. 2	12.1			1897									
262 Valda					1901			1910.0						
2 63 Dresda	Dez. 17							1910.0	т33	51	41.8	158	3	22.8
264 Libussa					1895			1910.0						
265 Anna	Okt. 9	15.1	13.8	II.I	1906	März	14.0	1910.0	334	34	37.9	251	23	58.2
266 Aline	Luli 8	115		8 2	1004	Lon	4.0	T000.0	65	48	70.0	T 417	50	TOD
267 Tirza					1904									
268 Adorea					1901			1910.0						52.6 55.4
269 Justitia														13.2
270 Anahita					1910				-					57.I
2/0 Ritania			11,0	0.9	1910	NOY.	40.0	1910.0	09	44	14.3	10	34	5/
271 Penthesilea .														
272 Antonia	Jan. 31	13.4	13.6	10.1	1899	Juli	28.0	1910.0	208	59	58.9	65	32	12.4
273 Atropos	Juli 1	10.8	3 11.6	9.0	1888	März	9.5	1910.0	261	20	1.8	118	28	21.5
274 Philagoria .														
275 Sapientia	März 27	11.0	12.0	8.5	; 1902	April	2 4.0	1910.0	36	26	14.9	31	7	20.2
276 Adelheid	Iuli 6	T2 1	, , , ,	2 77	TOOK	Maj	т8 о	1910.0	TT8	2 C	501	2772	21	то 8
270 Auement								1910.0						
278 Paulina								1910.0						17.4
279 Thule														
280 Philia	Wai a	1 13.5	1 13.0	1 101	1 1907	Ealur	12.0	1910.0	141	1 15	35.5	2 34	- 41	25.3
200 Linia	mice 2	14.	/ 1 14	1 10.0	1900) TUM	. 13.0	1910.	35	45	, 20.	4 00	, 2	75.5

Ω	i	g	μ	Log. a	Autorität
271°52 4.8	5 29 55.1	5° 45′ 31.7	665.88527	0.4844048	W. Luther.
208 16 16.8	11 16 52.0	7 5 15.3	732.9031	0.4566401	Herz.
326 14 27.5	I 9 23.6	2 43 0.0	733.1121	0.456558	Berberich.
208 48 21.5	2 49 38.7	7 52 21.3	1106.6025	0.3373433	Berberich.
62 9 21.1	5 11 20.0	11 37 34.2	651.4943	0.4907307	Tietjen.
162 54 3.3	15 37 35.8	6 2 43.0	802.267	0.4304584	Seydler.
0 18 41.2	25 5 2.6	_	782.08161	0.4378363	W. Luther.
		13 59 44.7			Berberich.
246 45 12.4	4 0 52.7	3 40 49.9	913.94026	0.3927259	
334 49 3 0.7	9 40 10.9	12 28 59.5	968.2498	0.3760128	Berberich.
25 44 44.7	12 56 32.7	7 1 38.3	633.85003	0.498680	P. V. Neugebauer.
156 56 53.5	10 29 21.1	5 38 31.8	650.38006	0.4912263	Knopf.
203 12 39.2	9 59 40.2	4 15 39.6	632.1027	0.4994793	Charlois.
180 9 24.1	6 38 16.5	15 28 16.9	824.9747	0.4223773	Knopf.
28 28 40.6	4 32 3.2	6 58 7.6	1091.0836	0.3414323	Schwarz.
14 21 30.2	9 30 41.9	4 40 24.1	780.0705	0.4385818	Laves.
183 38 34.4	13 17 58.1	3 43 37.0	683.2594	0.4769473	Berberich.
35 32 38.3	3 40 9.7	7 18 8.3	646.6326	0.4928994	Berberich.
207 43 26.2	14 15 2.4	11 52 56.0	838.8243	0.4175571	Stechert.
88 37 4.r	10 42 43.7	6 20 43.1	635.21397	0.4980577	Ernst.
168 3 52.2	6 17 53.3	7 7 16.5	554.7196	0.5372887	v. d. Groeben.
96 28 8.3	3 38 28.6	5 9 55.5	996.7823	0.3676042	Riem.
38 44 43.0	7 44 4.6	12 14 5.8	869.5200	0.4071513	Berberich.
217 47 31.0	1 16 53.0	4 21 32.2	722.5549	0.4607572	v. d. Groeben.
50 12 15.6	10 26 47.1	7 44 47.5	757.7014	0.4470056	Cerulli.
335 26 56.8	25 40 50.5	15 20 26.1	941.9275	0.3839928	Berberich.
236 19 21.7	13 21 1.2	9 1 20.5	755.6505	0.4477904	Berberich.
74 11 19.8	6 I 26.2	5 46 49.5	767.3626	0.4433373	v. d. Groeben.
121 47 54.0	2 25 39.9	7 45 32.6	652.37206	0.4903408	Berberich.
	5 25 49.2	12 18 39.7	838.9442	0.4175157	Berberich.
157 37 9.8 254 27 59.2	2 21 38.4	8 38 46.0	1088.54983	0.3421055	Berberich.
		* JE 40.0	670 1066		Knonf
337 6 44.8	3 34 52.4	5 47 42.9	679.1966	0.4786741	Knopf.
37 51 15.8	4 28 30.9	1 46 56.3	767.2554	0.4433777	Charlois.
159 7 3.3	20 24 0.8	9 19 0.4	955.4037	0.379880	Lange.
93 45 36.1	3 40 53.3	7 7 6.3	669.09610	0.4830121	Berberich.
134 55 18.6	4 44 44.3	9 18 0.2	769.93398	0.4423688	Lange.
211 36 29.4	21 35 30.5	4 7 12.9	645.07018	0.4935998	Hackenberg.
233 17 5.0	1.0 8 1	5 18 42.5	724.6235	0.4599295	Berberich.
62 20 28.0	7 49 44.6	7 47 48.7	776.6491	0.4398545	Berberich.
75 36 14.8	2 22 29.8	4 37 35.7	404.29239	0.6288740	Wedemeyer.
11 25 17.4	7 27 30.5	6 19 13.9	703.8816	0.4683380	Berberich.

Nr und Name			m_{\circ}	g	E	poche		Mittl.		M			ω	
iii. and maine	1911	Gr.		3	und (Oskulat.	ion	Ägu.		27.4				
										,	,,		. ,	-
281 Lucretia		_	13.1	0.11	1888	Nov.	2.5	1910.0	353	32	12.5	14	35	2.4
282 Clorinde	April 27	13.6	13.3	10.8	1905	Aug. 2	6.0	1910.0	277	9	37.1	294	43	20.3
283 Emma	März 27							1910.0						23.4
284 Amalia	Juli 10	11.3						1910.0					42	58.7
285 Regina	_	_	14.9	10.9	1889	Aug. 1	9.5	1910.0	357	36	27.2	12	28	58.7
286 Iclea	Juni 16	13.3	13.2	9.0	1905	Juni	7.0	1910.0	211	56	51.1	243	II	59.6
287 Nephthys	0kt. 16	10.8	10.7					1910.0						
288 Glauke			12.5					1910.0						
289 Nenetta			12.5					1910.0						
290 Bruna								1910.0						
291 Alice	Sent. 20	т2.8	12.6	TT.4	T005	Dev. 2	.10	10100	227	τ8	6 т	220	28	12.1
292 Ludovica								1910.0						
293 Brasilia														
294 Felicia														
295 Theresia														
										-	•			•
296 Phaëtusa			13.3	11.1	1890	Aug. 2	2.0	1910.0	330	33	11.7	250	4	4.6
297 Caecilia														
298 Baptistina .														
299 Thora														9.9
300 Geraldina	April 16	12.6	12.5	8.2	1895	Juli I	0.0	1910.0	336	44	54.3	283	3	2.7
301 Bavaria	Mai 28	12.3	12.7	9.3	1903	Ōkt. I	6.0	1910.0	95	17	5.1	121	19	7.3
302 Clarissa	April 13	14.3	13.9	11.2	1901	Sept. 1	6.0	1910.0	290	56	54.8	53	3	25.3
303 Josephina								1910.0						57.9
304 Olga	Sept. 23	10.9	12.4	9.7	1906	Febr.	2.0	1910.0	193	33	14.2	169	45	47.0
305 Gordonia	Nov. 18	11.5	12.5					1910.0						
306 Unitas	Dez. 23	11.4	10.7	8.2	1902	März 1	15.5	1910.0	240	21	9.1	165	31	57.6
307 Nike			13.1					1910.0						
308 Polyxo			11.0					1910.0						
309 Fraternitas .			12.7					1910.0						
310 Margarita														
311 Claudia	Juli 13	13.0	13.0	9.3	1903	Dez. 1	15.0	1010.0	301	3	0.2	71	48	18.0
312 Pierretta			12.5	9.0	1901	Nov. 1	15.0	1910.0	140	15	57.6	256	32	46.2
313 Chaldaea														
314 Rosalia	März 5	14.0	14.0	9.0	1907	Juli	7.0	1010.0	304	32	21.0	185	IQ	13.6
315 Constantia .														
316 Goberta	März 21	13.4	13.3	9.1	1893	Jan.	0.0	1010.0	11	20	4.0	307	20	30.4
317 Roxane	April 10	12.4	12.2	9.8	1904	März 2	24.0	1010.0	222	53	21,1	185	10	51.7
318 Magdalena .	Jan. II	13.0	13.2	9.0	1003	Sept. 2	26.0	1010.0	204	58	3.0	272	31	23.8
319 Leona			14.2	9.7	1906	Febr. 2	22.0	1910.0	82	18	24.7	216	10	52.6
320 Katharina														
	,	1.0	1 5.7	7.0			ر	- ,	5	٦			JT	1

Ω	i	T	μ	Log. a	Autorität
31° 18′ 2.7	5° 19' 37.6	7°35′40″8	1097.869	0.339637	Seydler.
144 47 14.0	9 1 23.8	4 40 42.6	992.0943	0.3689684	Berberich.
305 51 15.2	8 2 29.8	8 46 12.1	668.5906	0.483231	Berberich.
234 2 0.7	8 4 14.3	12 51 34.8	979.7243	0.3726018	Berberich.
312 19 2.3	17 16 57.9	II 55 35.4	661.4827	0.4863254	Charlois.
149 38 59.4	17 53 34.1	0 45 31.4	620.6276	0.5047837	Berberich.
142 13 54.2	10 I 20.1	I 19 35.4	982.6631	0.371735	Cerulli.
121 3 24.7	4 19 54.6	11 48 58.1	773.30145	0.4411052	R. Luther.
	6 39 22.0		728.0006		Berberich.
182 36 31.3		11 44 54.4		0.4585832	
10 35 19.4	22 13 28.1	15 4 22.7	995.1925	0.368066	S. Oppenheim.
161 7 22.5	I 50 32.2	5 19 14.8	1071.1737	0.3467645	Berberich.
43 11 16.0	14 52 8.2	1 41 17.2	880.6967	0.4034534	Berberich.
62 20 54.1	15 45 20.9			0.4574574	Charlois.
37 3 38.4	6 14 57.7	14 21 59.6	638.4006	0.4966088	P. V. Neugebauer
277 34 14.1	2 40 23.3	9 49 31.5	758.6107	0.4466584	Berberich.
121 1 53.2	1 44 47.3	9 6 25.9	1068.122	0.3475906	Coniel.
333 34 56.7	7 34 41.9	7 57 28.4	6 2 9.2581	0.5007852	Berberich.
8 7 5.8	6 17 37.4	5 28 22.7	1041.4193	0.3549207	Berberich.
242 2 9.3	1 35 16.8	3 29 25.0	935.125	0.386091	Berberich.
42 21 30.3	0 47 5.4	2 26 41.4		0.5063564	Rodin.
142 45 15.3	4 52 38.1	3 42 13.9	787.7302	0.4357527	Berberich.
7 53 21.9	3 26 4.1	6 22 53.8	950.1028	0.3814907	Berberich.
345 6 47.2	6 55 28.9	4 6 42.7	644.21972	0.4939818	Millosevich.
158 53 56.4	15 47 16.1	12 49 46.2	952.9185	0.3806339	Berberich.
211 11 17.9	4 25 2.2	11 33 54.0		0.4892213	Berberich.
141 43 35.3	7 15 13.9	8 40 35.6	980.0925	0.372493	Millosevich.
101 43 34.0	6 6 42.4			0.4634215	Knopf.
182 8 53.0	4 19 54.1	2 13 1.3		0.4390579	Berberich.
358 7 59.8	3 56 18.3	5 1 56.0		0.420034	Berberich.
230 43 26.5	3 5 55.3		775.6563	0.440225	Berberich.
81 17 5.0	3 15 38.0	0 58 32.8	721.5158	0.4611738	Berberich.
7 40 39.7	9 5 3.2		765.2695	0.4441281	P. V. Neugebauer
170 40 23.5	11 36 14.2	10 27 16.0	969.4022	0.3756684	Berberich.
171 17 15.6	12 32 21.5	10 26 41.1		0.4982835	Berberich.
161 22 12.5	2 24 30.8			0.3505486	Bohlin.
124 39 7.9	2 18 33.4	7 57 58.6	627.7382	0.501485	Berberich.
150 50 32.5	1 45 18.0		1025.9378	0.3592571	Berberich.
162 49 53.4	1		616.07949	0.506913	Mader.
189 5 22.4	10 33 32.6		1	0.5325148	Berberich.
104 7 44.4	10 44 15.4	14 17 50.9	103.9420	0.5445140	I Derbertell.

Nr. und Name	Opposition 1911 Gr.	m_{\circ}	g		poche Iskula		Mittl. Äqu.		М			ω	
321 Florentina	Dez. 6 12.9	13.2	9.5	1903	Febr.	0.81	1910.0	72	54	39.7	34	0	40.I
322 Phaeo	Jan. 12 12.4	12.3	8.8	1905	Nov.	14.0	1910.0	38	46	38.3	III	32	54.5
323 Brucia							1891.0						
							1910.0						
325 Heidelberga .	Juli 6 12.9	12.4	8.1	1906	Aug.	1.0	1910.0	270	22	12.3	74	39	7.7
326 Tamara	Nov. 23 12.1	11.1	8.7	1892	März	20.0	1910.0	298	49	14.0	236	57	34.2
327 Columbia	Mai 20 12.	13.0	9.5	1905	Febr.	7.0	1910.0	181	23	55.4	300	41	58.1
328 Gudrun		12.3	8.2	1906	Okt.	20.0	1910.0						
329 Svea		12.1		1901			1910.0				38	30	56.3
330 Adalberta		13.5	11.7	1892	März	20.5	1892.0	181	3	42	-	-	
331 Etheridgea		12.5	8.5	1907	Febr.	17.0	1910.0	158	33	59.1	333	35	38.5
332 Siri	April 30 12.6	12.6	9.1	1906	März	14.0	1910.0						
333 Badenia				1907	April	18.0	1910.0	215	17	59.6	14	14	18.9
334 Chicago		12.0		1908			1910.0	356	5	54.5	240	27	12.1
335 Roberta . · · .	Juni 14 10.5	11.6	8.8	1906	Febr.	2.0	1910.0	205	28	47.7	140	50	43.9
336 Lacadiera	März 23 11.7	11.8	9.6	1902	Juni	23.0	1910.0	49	57	10.0	28	49	41.1
337 Devosa		11.4					1910.0						
338 Budrosa				1899			1910.0						
339 Dorothea				1906	April	23.0	1910.0						
340 Eduarda		12.9	9.5	1906	Nov.	9.0	1910.0	346	36	56.4	39	58	16.1
341 California	April30 13.1	13.1	11.0	1907	Jan.	28.0	1910.0	172	9	40.7	201	20	59.2
342 Endymion													
343 Ostara							1910.0						
344 Desiderata													
345 Tercidina		11.2	8.8	1906	Okt.	20.0	1910.0	304	42	30.8	229	3	10.0
346 Hermentaria .	Dez. 22 11.3	11.5	8.0	1899	März	10.0	1910.0	156	0	38.3	287	6	50.9
	Mai 9 II.						1910.0						
348 May	Juli 19 13.3	12.9					1910.0						
349 Dembowska .							1910.0						
350 Ornamenta	April 24 13.3	12.7	8.6	1907	Juli	7.0	1910.0	240	6	7.0	331	59	51.1
351 Yrsa		12.2	8.8	1907	Jan.	28.0	1910.0	354	50	4.6	27	13	3.4
352 Gisela	Okt. I II.	12.1	10.0	1904	Juni	12.0	1910.0	255	25	57.5	1.42	27	24.3
353 Ruperto-Carola		14.2	10.9	1893	Febr.	22.5	1910.0	44	0	13.0	317	41	4.5
354 Eleonora		10.0	6.5	1901	Dez.	5.0	1910.0	303	30	35.7	3	34	23.7
355 Gabriella	Aug. 11 13.2	13.1	to.J	1905	Jan.	2.5	1910.0	12	25	36.0	94	32	55.4
356 Liguria		11.0	7.6	1907	Febr.	17.0	1910.0	64	40	7.2	74	23	55.2
357 Ninina	Juni 6 12.4	12.2	8.0				1910.0						
357 Ninina 358 Apollonia		12.5	8.8	1893	März	10.5	1910.0	86	52	43.5	248	18	56.9
359 Georgia	März 13 13.1	12.3	8.9	1902	Mai	2.5	1910.0	203	0	32.1	336	37	38.1
360 Carlova	Aug. 17 11.8	11.0	8.0	1008	Jan.	2.0	10100	22	1	5.4	286	54	56.0

			_			_					,
0	Ω			i			F		μ	Log. a	Autorität
40	47 9	5.0	2°	a6 [']	56.6	2°	39	3.I	723 6554	0.4603165	Berberich.
	56 18				8.1			14.3	763.9060	0.4446445	Berberich.
97	2 30				54			36	1119.60	0.333960	Berberich.
329	8 30				40.9			42.6	807.8079	0.4284657	Berberich.
	21 18				40.7	9		49.5	616.9272	0.5065151	Berberich.
32	9 9	9.7	23	47	22.4	10	48	17.5	1005.7638	0.365007	Bidschof.
355	39 4	4.3	7	9	11.2	3	4 I	18.3	766.8777	0.4435203	Berberich.
353	15 29	9.5	16	7	1.7	7	2	42.8	649.8767	0.4914504	Berberich.
	28 1		16	0	36.7	I	35	42.6	912.1349	0.3932983	Pannekoek.
	46 3		19	58			_	-	1174.9	0.32000	Berberich.
22	52 2	8.7	6	4	30.0	5	58	43.0	675.6718	0.4801805	Berberich.
32	3	7.2	2	52	35.7	5	10	38.7	768.7492	0.4428147	Berberich.
355	22 4	7.1	3	50	23.7	10	5	3.7	644.6123	0.4938053	Berberich.
134	20 5	I 2	4	37	53.7			49.6	458.6230	0.5923672	Berberi c h.
147	55 3	1.6	5	5	49.9	10	22	10.8	912.6621	0.3931311	Berberich.
235	1 1	3.3	5	38	30.7	5	28	48.1	1049.8478	0.3525869	Berberich.
355	4I I	9.0	7	51	56.4			52.0	964.4421	0.3771536	Coniel.
2 88	39 5	6.0	6	2	41.2	1	12	38.1	713.531	0.464396	Coniel.
174	26	7.4	9	53	59.7	5	49	6.3	679.2158	0.4786658	Berberich.
27	35 2	9.8	4	42	11.5	6	46	57.8	779.9016	0.4386445	Berberich.
29	3 5	7.0	5	40	1.7	ΙI	8	39.8	1087.7152	0.3423276	Berberich.
233					46.9		22		862.0140	0.4096615	Berberich.
38	42 I				13.3			25.7	947.4192	0.3823097	Berberich.
49			18	36	32.9	18	2 0	50.5	850.5213	0.4135476	Berberich.
212	31 3	0.1	9	44	20.7	3	30	29.0	1000.9051	0.3664092	Viaro.
		7.0			21.1			46.6	758.5325T	0.446688	Ehrenfeucht.
85	52 4	7.9			41.9	9		56.3	838.0358	0.4178294	Boccardi.
90	45 4	9.6			30.5	3		50.1	693.6375	0.472584	P. V. Neugebauer.
33	13 1	1.3			24.6	5		39.7	709.2917	0.466122	P. V. Neugebauer.
90	39 2	3.5	24	44	31.8	8	44	29.1	643.0948	0.4944877	Berberich.
	40 2			_	56.4			21.2		0.4420597	Berberich.
	18 5		_	22				2 6.8	1091.9690	0.3411975	Berberich.
103	23 1	4.9			36.4			26.7	787.080	0.435992	Berberich.
	49 2				24.1			44.4	754.8010	0.4481160	Ciscato.
352	19 5	2.4	4	21	6.4	6	12	55.9	877.280	0.404580	Berberich.
		1.3	8	16		14	2	9.4		0.4399913	Berberich.
	47 5		15		50.1	4		44.9	634.456	0.498404	P. V. Neugebauer.
173	8 1	4.8	3	31	44.7			24. I		0.459554	Coniel.
6	41 1	13.1	6	48	31.7			30.9		0.435783	Berberich.
133	23 1	12.5	11	39	55.5	10	20	45.1	682.0180	0.4774739	Berberich.

Nr. und Name	Oppositi 1911	ion Gr.	$m_{_{0}}$	g		Epoche Oskula		Mittl. Äqu.		М			ω	
361 Bononia	Juni 18	14.2	12.2	80	1006	Okt.	20.0	1910.0	215	,	55.4	75	, ,	20.7
362 Havnia		11.0	22			Febr.		1910.0					44 11	6.7
363 Padua			11.6			Febr.		1910.0						
364 Isara	-		11.7			Febr.		1910.0						
365 Corduba			12.2			Juli		1910.0						
305 Column	ban. 14	12.0	14.2	0.7	1904	,,,,,,,	44.0	1910.0	405)	34.3	209	40	43.)
366 Vincentina .						März		1910.0						
367 Amicitia			~			März		1910.0					16	37-5
368 Haidea	Dez. 23	14.1	13.5			Juli		1910.0						56.3
369 Aëria			12.7			Juli	12.0	1910.0				266	17	7.5
37º Modestia	Sept. 16	12.3	12.8	10.4	1907	Juli	7.0	1910.0	294	33	33.7	66	1	12.1
371 Bohemia	Juli 21	11.4	11.8	8.4	1903	Nov.	5.0	1910.0	134	40	33.2	338	44	39.2
372 Palma	_		10.5		1905		4.0	1910.0						
373 Melusina			12.8		1907		9.0	1910.0						
374 Burgundia .	Aug. 3	11.5	11.7			Jani		1910.0						
375 Ursula		_	11.0			Jan.		1910.0						
376 Geometria .	1)07 12	T2.7	11.8	0.4	T004	Nov.	TO 0	1910.0	171	28	26.4	214	16	28.2
377 Campania .			11.5			Okt.		1910.0						
378 Holmia	- 1		12.6		/ -	Aug.		1910.0						
379 Huenna	_		12.6	1	_	April		1910.0						
380 Fiducia		_	12.6	-	-	Jan.		1910.0						
			12.0											
381 Myrrha		_	12.4					1910.0						
382 Dodona			12.1		_	Mai	_	1910.0						
383 Janina			13.3			Aug.		1910.0	290	32	49.4	313	43	28.9
384 Burdigala		-	11.7			April		1910.0	119	46	59.6	30	33	43.4
385 Ilmatar	Okt. 27	10.7	10.3	6.7	1904	Mai	3.0	1910.0	38	31	8.7	184	18	24.2
386 Siegena	Aug. 29	9.7	10.5	6.8	1906	Aug.	21.0	1910.0	317	54	55.1	217	39	48.2
387 Aquitania .		_	9.8			Juli			353	6	10.2	153	33	34.9
388 Charybdis .	Juni 26	11.4	11.7	7.8	1906	Juli	12.0	1910.0	338	15	19.8	322	41	28.4
389 Industria	März 5	10.8	11.1	8.0	1899	Juni	0.81	1910.0						
390 Alma	Jan. 7	12.5	13.2	10.0	1899	Mai	17.0	1910.0	88	15	19.6	188	31	9.3
391 Ingeborg	Mai 13	13.8	13.2	10.8	1906	Jan.	13.0	1910-0	82	56	37.0	145	9	23.8
392 Wilhelmina.	_	_	12.2	8.3	1894	Nov.	4.5	1910.0	38	30	IO.I	141	27	52.4
393 Lampetia	März 2	12.0	II.O	7.6	1904	Dez.	9.0	1910,0	130	40	16.4	86	49	15.I
394 Arduina														
395 Delia	Mai 30	12.3	13.0	9.5	1894	Dez.	3.5	1910.0	136	43	41.3	20	38	45.7
396 Acolia		-	122	0.7	1804	Dev	2 5	10100	156	12	22 8	тΩ	217	T2.4
397 Vienna														
398 Admete														
399 Persephone.														
400 Ducrosa														
7-9 10110101111 11			-4.0	20.4	1093	201111	- 0.7	191010)) /	44	*9.1	~49	-/	14.0

δ	i	q	μ	Log. a	Autorität
19 36 14.1	12° 36′ 57.″4	11° 31′ 54.9	451,1434	0.5971280	Berberich.
27 23 27.4	8 4 45.0	2 31 4.1	857.1587	0.4112969	Berberich.
65 8 10.2	5 58 1.3	4 3 32.9	778.9495	0.438998	Antoniazzi.
105 12 52.6	6 0 3.6	8 36 53.9	1072.5804	0.3463845	Berberich.
185 54 15.1	12 43 37.8	8 24 38.7	754.5331	0.448218	Berberich.
347 59 13.4	10 35 26.9	3 27 2.7	636.2125	0.4976029	Berberich.
83 7 23.4	2 57 0.7	5 28 31.2	1072.8626	0.3463083	Berberich.
30 7 47.4	7 48 12.9	11 8 13.1	663.984	0.485231	Berberich.
94 30 31.4	12 43 17.6	5 33 23.3	822.7067	0.4231744	Berberich.
90 58 8.9	7 52 10.3	5 13 41.6		0.3663261	Berberich.
84 12 33.9	7 22 40.8	3 35 43.7	788.36429	0.435520	Mader.
28 25 22.6	23 39 56.7	15 37 36.8	635.9909	0.4977038	Berberich.
4 26 22.4	15 27 4.2	8 34 43.1	646.5817	0.4929222	Berberich.
19 35 36.2	8 57 56.2	4 37 44.9	765.5599	0.4440183	Berberich.
37 27 33.3	15 57 18.0	5 41 17.0	640.8169	0.4955151	Heuer.
02 13 7.9	5 25 21.7	9 54 46.1	1025.0162	0.3595172	Berberich.
10 44 55.0	6 39 37.8	4 26 14.5	804.920	0.429503	Coniel.
33 14 43.6	6 57 56.3	7 20 19.7	766.5723	0.4436357	Berberich.
72 51 58.2	1 36 30.6	11 5 26.6	641.8494	0.4950490	Coniel.
95 22 51.6	6 10 16.7	6 33 30.2	809.782	0.427760	P. V. Neugebauer.
25 23 34.0	12 34 45.8	7 15 16.3	620.6242	0.5047852	Berberich.
15 49 0.2	7 26 3.1	10 9 28.8	645.0171	0.4936236	Berberich.
93 25 27.3	2 39 13.5	9 59 26.2	638.8727	0.4963949	Berberich.
48 21 10.9	5 38 57.3	8 22 34.3	820.6462	0.423900	Kromm.
45 47 13.2	13 41 2.2	7 30 49.9	739-9493	0.4538697	Witt.
67 7 26.1	20 15 35.6	9 34 42.5	719.3456	0.4620460	Berberich.
28 46 8.2	17 57 51.9	13 47 16.3	782.6076	0.4376414	Ogburn.
55 28 53.3	6 28 59.6	3 28 2.8	680.7507	0.4780123	Berberich.
82 46 45.1	8 7 8.8	3 53 14.7	842.4772	0.416299	Peyra.
05 34 11.1	12 8 55.9	7 28 40.3	821.022	0.423768	Conicl.
12 42 11.7	23 2 49.0	18 0 7.6		0.3654391	Berberich.
11 52 31.8	15 42 21.3	10 13 36.9	694.356	0.472283	Berberich.
14 28 57.3	14 54 43.5	19 14 19.0	766.9701	0.4434854	Berberich.
68 21 10.6		13 11 32.3	771.095	0.441933	Coniel.
60 2 6.3	3 31 42.0	7 16 9.6	764.391	0.444461	Capon.
51 27 25.2	2 37 50.3	10 18 30.4	782.986	0.437501	Coniel.
28 32 12.0	12 43 25.8	14 22 11.1	829.3549	0.420844	Mader.
80 38 14.2	9 29 36.6	12 49 55.4	782.8137	0.4375654	Franz.
47 18 20.6	13 10 0.0	4 6 33.0	665.0959	0.4847482	Berberich.
28 49 40.9	10 36 55.7	5 15 50.9	641.871	0.495039	Berberich.

Nr. und Name															
401 Ottlilia Dez. 19 12.0 12.6 8.2 1905 Dez. 24.0 1910.0 220° 5 45.6 197° 2 51.2 26.2 63.0 64.5	Nu and Name	Opposit	ion			Е	poche		Mittl.						
401 Ottilia Dez. 19 12.0 12.6 8.2 1905 Dez. 24.0 1910.0 220° 5 45.6 197° 2 51.2 26.2 26.2 26.4 26.4 26.4 27.1 26.5 27.	M. and Name			m_{\circ}	g			tion			М			ω	
Jan. 21 10.1 10.7 7.7 1895 Marz 27.5 1910.0 28 44 8.7 12 26 25.6					-				[_					
Jan. 21 10.1 10.7 7.7 1895 Marz 27.5 1910.0 28 44 8.7 12 26 25.6	401 Ottilia	Dez. To	12.0	т2 б	82	TOOF	Doy /	240	TOTOO	220	-	15 6	TOP	,	"
403 Cyane						1805	Mary C	77.	1010.0	28	11	45.0	197	26	51.2
404 Arsinoë				' 1					1010.0	150	44				
405 Thia															
100 100				_					1010.0						
408 Fama	1.7	р.н. ж	7.4	11.0	0.0	1093	***************************************	47.0	1910.0	/3	30	35.0	305	14	7.9
408 Fama	406 Erna	Dez. 33	13.7	13.5	9.8	1905	Aug.	31.5	1910.0	352	15	46.2	34	30	10.2
10 10 10 10 10 10 10 10	407 Arachne														
410 Aspasia Okt. 7 11.0 10.7 7.6 1903 Okt. 19.5 1910.0 163 47 0.0 351 8 7.6 100 Okt. 19.5 1910.0 311 22 7.1 168 47 7.0 411 Xanthe Jan. 3 13.1 12.5 8.7 1906 Jan. 24.5 1910.0 185 43 46.2 174 42 24.4 42 14 Liriope Mai 21 11.7 11.9 8.5 1904 Dec. 29.0 1910.0 252 59 27.0 92 48 23.5 14 Liriope Mai 22 13.8 13.4 415 Palatia Mai 7 12.9 11.6 8.1 1900 Jan. 0.0 1910.0 184 57 33.5 299 54 3.1 14 7 15.9 16.6 11.7 11.5 8.0 1900 Jan. 0.0 1910.0 351 8 15.5 293 39 15.0 160 Vaticana Mai 7 12.9 11.6 8.1 1900 Jan. 0.0 1910.0 351 8 15.5 293 39 15.0 160 Vaticana Mar 5 13.1 12.6 5 1905 Dec. 24.0 1910.0 60 41 21.2 12 15.8 190 Jan. 22.5 22.6 32.6 40 16 21.1 12.1 22.6 190.0 22.5 22.6 32.6 40 16 21.1 22.6 22.6 22.6 32.6 40 16 22.1 22.6 32.6 40 16 22.1 22.6 32.6 42.	408 Fama	Juli 26	-	_											
Ho Chloris	409 Aspasia	Okt. 7							1010.0	163	47	0.0	25 T	8	76
HI Nanthe Jan. 3 13.1 12.5 8.7 1906 Jan. 24.5 1910.0 185 43 46.2 174 42 24.4 113 115 11.7 11.9 22 1866 Jan. 24.5 1910.0 252 59 27.0 92 48 23.5 24.0 24.4									1010.0	311	22	7.T	168	17	7.0
412 Elisabetha															
412 Elisabetha . Mai 21 11.7 11.9 8.5 1904 Dez. 29.0 1910.0 252 59 27.0 92 48 23.5 141 Liriope			13.1	12.5	8.7	1906	Jan. 3	24.5	1910.0	185	43	46.2	174	42	24.4
113 Edburga			11.7	11.9	8.5	1904	Dez.	29.0	1910.0	252	59	27.0	92	48	23.5
Harrisope Mai 7 12.9 13.8 13.4 8.6 1898 April 24.0 1910.0 184 57 33.5 299 54 3.1 140 141 141 164 195 25 17.1 147 8uevia Mar Mar 5 13.1 12.6 9.5 1905 Dez. 24.0 1910.0 186 5 50.0 343 18 38.4 190 Mar 240 Bertholda Mar 5 13.1 12.6 9.5 1905 Dez. 24.0 1910.0 186 5 50.0 343 18 38.4 190 Mar 240 Bertholda Mar 7 15.5 14.2 11.1 11.2 1904 Mar 23.0 1910.0 255 74.3 216 25 36.5 27 27 27 28 28 28 28 29 29 29 29					9.2	1896	Jan.	10.5	1910.0	72	21	21.0	248	52	42.0
415 Palatia	414 Liriope	Mai 22	13.8	13.4	8.6	1898	April:	24.0	1910.0	184	57	33.5	299	54	3.1
416 Vaticana	415 Palatia	Mai 7	12.9	11.6	8.1	1900	Jan.	0.0	1910.0	351	8	15.5	293	39	15.0
117 Suevia Aug. 11 13.2 12.7 9.2 1907 Sept. 25.0 1910.0 186 5 50.0 343 18 38.4 1910 Aurelia 13.1 12.6 9.5 1905 Dez. 24.0 1910.0 60 41 21.9 123 1 58.9 1907 Jan. 28.0 1910.0 225 26 32.6 40 16 21.9 12.3 15.8 1907 Jan. 28.0 1910.0 359 57 43.4 216 25 36.5 422 Berolina Febr. 2 14.3 13.4 11.2 1896 Dez. 4.5 1910.0 299 14 47.2 205 57 54.3 42.4 Gratia Febr. 2 14.3 13.4 11.2 1904 Mai 23.0 1910.0 299 14 47.2 205 57 54.3 42.4 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 299 14 47.2 205 57 54.3 42.4 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 299 14 47.2 205 57 54.3 42.4 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 299 14 47.2 205 57 54.3 42.3 42.4 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 295 5 56.3 118 48 56.6 426 Hippo Juli 12 11.6 11.5 7.8 1897 Sept. 30.0 1910.0 295 5 56.3 118 48 56.6 426 Hippo Jan. 3 12.3 12.6 9.4 1905 Sept. 20.5 1910.0 300 39 10.6 13 51 45.2 430 Hybris . Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 331 42 21.7 166 36 34.0 34	C 37 11														
118 Alemannia Mārz 5 13.1 12.6 9.5 1905 Dez. 24.0 1910.0 60 41 21.9 123 1 58.9 190 1910.0 225 26 32.6 40 16 21.9 12.3 1 12.3 17.7 1904 Dez. 29.0 1910.0 359 57 43.4 216 25 36.5 421 Zāhringia .						-				114	14	16.4	195	25	17.1
419 Aurelia Jan. 6 12.3 11.1 8.0 1907 Jan. 28.0 1910.0 225 26 32.6 40 16 21.9 12.0 1910.0 359 57 43.4 216 25 36.5 12.2 12.3 7.7 1904 Dez. 29.0 1910.0 359 57 43.4 216 25 36.5 12.2 Berolina Mai 7 15.5 14.2 11.2 1904 Mai 23.0 1910.0 299 14 47.2 205 57 54.3 42.4 Gratia Aug. 19 11.1 11.2 7.2 1906 Sept. 30.0 1910.0 87 12 6.0 193 49 7.3 12.4 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 174 2 31.1 329 36 33.8 12.5 Cornelia	417 Suevia	_	_					25.0	1910.0	186	5	50.0	343	18	38.4
421 Zähringia . Mai 7 15.5 14.2 11.2 1904 Mai 23.0 1910.0 359 57 43.4 216 25 36.5 422 Berolina . Febr. 2 14.3 13.4 11.2 1896 Dez. 4.5 1910.0 43 3 30.9 333 4 23.2 423 Diotima . Aug. 19 11.1 11.2 7.2 1906 Sept. 30.0 1910.0 87 12 6.0 193 49 7.3 424 Gratia . Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 174 2 31.1 329 36 33.8 425 Cornelia . — 13.1 9.4 1897 Jan. 20.5 1910.0 295 5 56.3 118 48 56.6 426 Hippo . Juli 12 11.6 11.5 7.8 1897 Sept. 30.0 1910.0 172 10 55.2 221 45 45.3 427 Galene . März 31 13.0 12.8 9.0 1905 Jan. 14.5 1910.0 184 20 0.0 428 Monachia . Nov. 12 11.7 13.5 11.1 1900 Aug. 7.5 1910.0 300 39 10.6 13 51 45.2 429 Lotis . Jan. 3 12.3 12.6 9.4 1905 Sept. 22.5 1910.0 331 42 21.7 166 36 34.0 199bis . Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 15 12 12.0 174 56 25.2 431 Nephele . März 28 13.2 12.6 8.5 1906 Mai 29.5 1910.0 15 12 12.0 174 56 25.2 431 Nephele . März 28 13.2 12.6 8.5 1906 Febr. 2.0 1910.0 279 57 55.7 209 48 3.8 432 Pythia . Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 285 40 28.0 177 46 3.8 434 Hungaria . April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 226 7 44.9 123 1 51.3 435 Ella — 9.7 10.6 1907 Okt. 15.0 1910.0 226 7 44.9 123 1 51.3 435 Ella — 9.7 10.6 1907 Okt. 15.0 1910.0 246 7 44.9 123 1 51.3 435 Ella — 12.9 8.7 1906 Febr. 2.0 1910.0 90 41 57.0 23 21 16.1 437 Rhodia . Jan. 6 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 90 41 57.0 23 21 16.1 439 Ohio . Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 149 12 37.6 200 28 41.2 439 Ohio . Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 241 8 28.0		_							1910.0	60	41	21.9	123	1	58.9
421 Zähringia			12.3						1910.0	225	26	32.6	40	16	21.9
422 Berolina Febr. 2 14.3 13.4 11.2 1896 Dez. 4.5 1910.0 43 3 30.9 333 4 23.2 423 Diotima Aug. 19 11.1 11.2 7.2 1906 Sept. 30.0 1910.0 87 12 6.0 193 49 7.3 424 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 174 2 31.1 329 36 33.8 425 Gornelia — — 13.1 9.4 1897 Jan. 20.5 1910.0 295 5 56.3 118 48 56.6 426 Hippo Juli 12 11.6 11.5 7.8 1897 Sept. 30.0 1910.0 172 10 55.2 221 45 45.3 427 Galene März 31 13.0 12.8 9.0 1905 Jan. 14.5 1910.0 184 20 0.0 5 55 16.4 428 Monachia Nov. 12 11.7 13.5 11.1 1900 Aug. 7.5 1910.0 300 39 10.6 13 51 45.2 429 Lotis Jan. 3 12.3 12.6 9.4 1905 Sept. 22.5 1910.0 331 42 21.7 166 36 34.0 430 Hybris Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 279 5	420 Bertholda	_	-	12.3	7.7	1904	Dez.	29.0	1910.0	359	57	43.4	216	25	36.5
422 Berolina Febr. 2 14.3 13.4 11.2 1896 Dez. 4.5 1910.0 43 3 30.9 333 4 23.2 423 Diotima Aug. 19 11.1 11.2 7.2 1906 Sept. 30.0 1910.0 87 12 6.0 193 49 7.3 424 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 174 2 31.1 329 36 33.8 425 Gornelia — — 13.1 9.4 1897 Jan. 20.5 1910.0 295 5 56.3 118 48 56.6 426 Hippo Juli 12 11.6 11.5 7.8 1897 Sept. 30.0 1910.0 172 10 55.2 221 45 45.3 427 Galene März 31 13.0 12.8 9.0 1905 Jan. 14.5 1910.0 184 20 0.0 5 55 16.4 428 Monachia Nov. 12 11.7 13.5 11.1 1900 Aug. 7.5 1910.0 300 39 10.6 13 51 45.2 429 Lotis Jan. 3 12.3 12.6 9.4 1905 Sept. 22.5 1910.0 331 42 21.7 166 36 34.0 430 Hybris Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 279 5	421 Zähringia	Mai 7	15.5	14.2	11.2	1001	Mai ·	23.0	1010.0	200	14	17.2	205	c 17	512
423 Diotima Aug. 19 11.1 11.2 7.2 1906 Sept. 30.0 1910.0 87 12 6.0 193 49 7.3 424 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 174 2 31.1 329 36 33.8 425 Cornelia — 13.1 9.4 1897 Jan. 20.5 1910.0 295 5 56.3 118 48 56.6 426 Hippo Juli 12 11.6 11.5 7.8 1897 Sept. 30.0 1910.0 172 10 55.2 221 45 45.3 427 Galene März 31 13.0 12.8 9.0 1905 Jan. 14.5 1910.0 184 20 0.0 5 55 16.4 428 Monachia Nov. 12 11.7 13.5 11.1 1900 Aug. 7.5 1910.0 300 39 10.6 13 51 45.2 430 Hybris Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 331 42 21.7 166 36 34.0 431 Nephele März 28 13.2 12.6 8.5 1906 Mai 29.5 1910.0 279 57 55.7 209 48 3.8 432 Pythia Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 278 57 55.7 209 48 3.8 <td></td> <td></td> <td>14.3</td> <td>13.4</td> <td>11.2</td> <td>1806</td> <td>Dez.</td> <td>4.5</td> <td>1010.0</td> <td>12</td> <td></td> <td></td> <td></td> <td></td> <td></td>			14.3	13.4	11.2	1806	Dez.	4.5	1010.0	12					
424 Gratia Febr. 4 12.5 12.8 9.3 1903 Mai 29.0 1910.0 174 2 31.1 329 36 33.8 13.1 9.4 1897 Jan. 20.5 1910.0 295 5 56.3 118 48 56.6 426 Hippo Juli 12 11.6 11.5 7.8 1897 Sept. 30.0 1910.0 172 10 55.2 221 45 45.3 428 Monachia															
425 Cornelia			í												
426 Hippo Juli 12 11.6 11.5 7.8 1897 Sept. 30.0 1910.0 172 10 55.2 221 45 45.3 427 Galene März 31 13.0 12.8 9.0 1905 Jan. 14.5 1910.0 184 20 0.0 5 55 16.4 1929 Lotis Jan. 3 12.3 12.6 9.4 1905 Sept. 22.5 1910.0 331 42 21.7 166 36 34.0 1920 Pythia Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 279 57 55.7 209 48 3.8 192 Pythia															
427 Galene März 31 13.0 12.8 9.0 1905 Jan. 14.5 1910.0 184 20 0.0 5 55 16.4 428 Monachia Nov. 12 11.7 13.5 11.1 1900 Aug. 7.5 1910.0 300 39 10.6 13 51 45.2 429 Lotis Jan. 3 12.3 12.6 9.4 1905 Sept. 22.5 1910.0 331 42 21.7 166 36 34.0 430 Hybris Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 279 57 55.7 209 48 3.8 431 Nephele März 28 13.2 12.6 8.5 1906 Mai 29.5 1910.0 279 57 55.7 209 48 3.8 432 Pythia Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 258 54 29.7 172 15 56.3 433 Eros 9.7 10.6 1907 Okt. 15.0 1910.0 285 40 28.0 177 46 3.8 435 Ella 12.1 9.3 1906 Nov. 9.0 1910.0 24 18 22.6 331 7 16.6 436 Patricia 13.6<) [19.00	793)	30.5	110	40	50.0
427 Galene März 31 13.0 12.8 9.0 1905 Jan. 14.5 1910.0 184 20 0.0 5 55 16.4 428 Monachia Nov. 12 11.7 13.5 11.1 1900 Aug. 7.5 1910.0 300 39 10.6 13 51 45.2 429 Lotis Jan. 3 12.3 12.6 9.4 1905 Sept. 22.5 1910.0 331 42 21.7 166 36 34.0 430 Hybris Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 15 12 12.0 174 56 25.2 431 Nephele März 28 13.2 12.6 8.5 1906 Mai 29.5 1910.0 279 57 55.7 209 48 3.8 432 Pythia Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 258 54 29.7 172 15 56.3 434 Hungaria April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 285 40 28.0 177 46 3.8 436 Patricia — — 12.9 8.7 1906 Nov. 9.0 1910.0 44 18 22.6 331 7 16.6 438 Zeuxo — — 11.8 8.8 1902 Nov. 23.5 1910.0 90 41 57.0 23 21 16.1	426 Hippo	Juli 12	11.6	11.5	7.8	1897	Sept.	30.0	1910.0	172	10	55.2	221	45	45.3
428 Monachia Nov. 12 11.7 13.5 11.1 1900 Aug. 7.5 1910.0 300 39 10.6 13 51 45.2 429 Lotis Jan. 3 12.3 12.6 9.4 1905 Sept. 22.5 1910.0 331 42 21.7 166 36 34.0 430 Hybris Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 15 12 12.0 174 56 25.2 431 Nephele März 28 13.2 12.6 8.5 1906 Mai 29.5 1910.0 279 57 55.7 209 48 3.8 432 Pythia Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 258 54 29.7 172 15 56.3 433 Eros — — 9.7 10.6 1907 Okt. 15.0 1910.0 285 40 28.0 177 46 3.8 434 Hungaria April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 226 7 44.9 123 1 51.3 435 Ella — — 12.1 9.3 1906 Nov. 9.0 1910.0 24 18 22.6 331 7 16.6 436 Patricia — — 12.9 8.7 1906 Nov. 9.0 1910.0 90 41 57.0 23 21 16.1	427 Galene				9.0	1905	Jan.	14.5	1910.0	184	20	0.0	5	55	16.4
429 Lotis Jan. 3 12.3 12.6 9.4 1905 Sept. 22.5 1910.0 331 42 21.7 166 36 34.0 430 Hybris Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 15 12 12.0 174 56 25.2 431 Nephele März 28 13.2 12.6 8.5 1906 Mai 29.5 1910.0 279 57 55.7 209 48 3.8 432 Pythia Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 258 54 29.7 172 15 56.3 433 Eros April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 285 40 28.0 177 46 3.8 435 Ella 12.1 9.3 1906 Nov. 9.0 1910.0 226 7 44.9 123 1 51.3 436 Patricia 12.1 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 90 41 57.0 23 21 16.1 438 Zeuxo 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 77 29 16.7 59 5 58.1 439 Ohio 13a. 212.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0		Nov. 12	11.7	13.5	11.1	1900	Aug.	7.5	1910.0	300	39	10.6	13	5 T	45.2
430 Hybris Sept. 30 12.0 13.2 9.6 1898 Jan. 21.5 1910.0 15 12 12.0 174 56 25.2 431 Nephele März 28 13.2 12.6 8.5 1906 Mai 29.5 1910.0 279 57 55.7 209 48 3.8 432 Pythia Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 258 54 29.7 172 15 56.3 433 Eros April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 285 40 28.0 177 46 3.8 435 Ella April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 226 7 44.9 123 1 51.3 436 Patricia - 12.9 8.7 1906 Febr. 2.0 1910.0 90 41 57.0 23 21 16.1 437 Rhodia Jan. 6 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 90 41 57.0 23 21 16.1 438 Zeuxo - 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0			12.3	12.6	9.4	1905	Sept.	22.5	1910.0	331	42	21.7	166	36	34.0
431 Nephele März 28 13.2 12.6 8.5 1906 Mai 29.5 1910.0 279 57 55.7 209 48 3.8 432 Pythia Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 258 54 29.7 172 15 56.3 433 Eros — — 9.7 10.6 1907 Okt. 15.0 1910.0 285 40 28.0 177 46 3.8 434 Hungaria April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 226 7 44.9 123 1 51.3 435 Ella — — 12.9 8.7 1906 Nov. 9.0 1910.0 44 18 22.6 331 7 16.6 436 Patricia — — 12.9 8.7 1906 Febr. 2.0 1910.0 90 41 57.0 23 21 16.1 437 Rhodia Jan. 6 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 77 29 16.7 59 5 58.1 438 Zeuxo — — 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 <td>430 Hybris</td> <td>Sept. 30</td> <td>12.0</td> <td>13.2</td> <td>9.6</td> <td>1898</td> <td>Jan.</td> <td>21.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	430 Hybris	Sept. 30	12.0	13.2	9.6	1898	Jan.	21.5							
432 Pythia Okt. 18 11.6 11.3 8.7 1906 Febr. 2.0 1910.0 258 54 29.7 172 15 56.3 433 Eros April 27 10.9 11.8 10.4 1907 Okt. 15.0 1910.0 285 40 28.0 177 46 3.8 434 Hungaria April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 226 7 44.9 123 1 51.3 435 Ella — 12.1 9.3 1906 Nov. 9.0 1910.0 44 18 22.6 331 7 16.6 436 Patricia — — 12.9 8.7 1906 Febr. 2.0 1910.0 90 41 57.0 23 21 16.1 437 Rhodia Jan. 6 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 77 29 16.7 59 5 58.1 438 Zeuxo — — 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0														-	_
433 Eros — 9.7 10.6 1907 Okt. 15.0 1910.0 285 40 28.0 177 46 3.8 434 Hungaria April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 226 7 44.9 123 1 51.3 435 Ella — 12.1 9.3 1906 Nov. 9.0 1910.0 44 18 22.6 331 7 16.6 436 Patricia — 12.9 8.7 1906 Febr. 2.0 1910.0 90 41 57.0 23 21 16.1 437 Rhodia Jan. 6 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 77 29 16.7 59 5 58.1 438 Zeuxo — 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0	431 Nephele	März 28	13.2	12.6	8.5	1906	Mai	29.5	1910.0	279	57	55.7	209	48	3.8
433 Eros — 9.7 10.6 1907 Okt. 15.0 1910.0 285 40 28.0 177 46 3.8 434 Hungaria April 27 10.9 11.8 10.4 1908 März 3.0 1910.0 226 7 44.9 123 1 51.3 435 Ella — 12.1 9.3 1906 Nov. 9.0 1910.0 44 18 22.6 331 7 16.6 436 Patricia — 12.9 8.7 1906 Febr. 2.0 1910.0 90 41 57.0 23 21 16.1 437 Rhodia Jan. 6 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 77 29 16.7 59 5 58.1 438 Zeuxo — 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0	432 Pythia	Okt. 18	11.6	11.3	8.7	1906	Febr.	2.0	1910.0	258	54	29.7	172	15	56.3
435 Ella - 12.1 9.3 1906 Nov. 9.0 1910.0 44 18 22.6 331 7 16.6 436 Patricia - 12.9 8.7 1906 Febr. 2.0 1910.0 90 41 57.0 23 21 16.1 438 Zeuxo - 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0 28 28.0 28 28.0 28 28.0 28 28.0 28 28.0 28 28.0 28 28.0 28 28.0 28 28.0 28 28.0 28 28.0 28.0 28 28.0 2				9.7	10.6	1907	Okt.	15.0	1910.0	285	40	28. C	177	46	3.8
436 Patricia	434 Hungaria	April 27	10.9	11.8	10.4	1908	März	3.0	1910.0	226	7	44.9	123	1	51.3
437 Rhodia Jan. 6 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 77 29 16.7 59 5 58.1 438 Zeuxo 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0	435 Ella	-		12.1	9.3	1906	Nov.	9.0	1910.0	44	18	22.6	331	7	16.6
437 Rhodia Jan. 6 13.6 12.7 10.1 1906 Nov. 9.0 1910.0 77 29 16.7 59 5 58.1 438 Zeuxo — 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0				12.9	8.7	1906	Febr.	2.0	1910.0	90	41	57.0	23	2 I	16.1
438 Zeuxo - 11.8 8.8 1902 Nov. 23.5 1910.0 149 12 37.6 200 28 41.2 439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0	437 Rhodia	Jan. 6	13.6	12.7	10.1	1906	Nov.	9.0	1910.0	77	29	16.7	59	5	58.1
439 Ohio Jan. 2 12.5 12.7 8.6 1900 Jan. 0.0 1910.0 30 57 55.5 231 8 28.0	438 Zenxo			11.8	8.8	1902	Nov.	23.5	1910.0	140	12	37.6	200	28	41.2
440 Theodora Sept. 18 12.7 13.1 10.9 1898 Okt. 18.5 1910.0 284 37 41.8 176 6 6.1	439 Ohio	Jan. 2	12.5	12.7	8.6	1900	Jan.	0.0	1910.0	30	57	55.5	231	8	28.0
	440 Theodora	Sept. 18	12.7	13.1	10.9	1898	Okt.	18.5	1910.0	284	37	41.8	176	6	6.1

Ω	i	P	μ	Log. a	Autoritāt
38° 59′ 4.6	6 5 47.1	2 40 12.6	583. 3 070	0.5227396	Berberich.
129 42 3.3	11 50 5.2	6 24 49.0	868.759	0.407405	Coniel.
245 49 39.0	9 8 8.8	5 49 4.3	753.7444	0.4485217	Berberich.
92 48 21.3	14 3 57.8	11 41 13.6		0.4140395	Berberich.
256 8 35.2	11 48 17.6	14 32 24.7	856.814	0.411412	Coniel.
317 9 4.5	4 14 56.5	10 10 53.0	710.727	0.465535	Berberich.
295 5 4.9	7 31 34.3	3 59 22.5	834.1108	0.4191886	Berberich.
299 37 51.7	9 6 14.2	7 54 31.1	627.210	0.501729	Berberich.
242 44 32.8	11 12 44.4	3 53 20.9		0.411221	Kromm.
97 25 39.4	10 53 15.3	13 45 44.0	788.824	0.435346	P. V. Neugebauer
108 9 35.1	15 36 26.1	6 53 35.1	705.017	0.467871	Berberich.
106 41 22.8	13 45 36.1	2 27 5.2	772.8598	0.4412713	Berberich.
105 12 38.6	18 52 24.9	19 43 23.0	856.555	0.411501	Berberich.
113 29 44.5	9 38 22.8	5 29 23.8	540.7539	0.544671	Berberich.
128 20 25.3	8 5 38.4	17 36 27.4	762.3720	0.445227	Coddington.
58 38 36.6	12 55 45.4	12 35 49.6	761.6611	0.4454966	Boccardi.
199 56 31.4	6 35 47.5	8 5 25.9	759.1427	0.4464555	Berberich.
249 11 17.0	6 49 0.3	6 49 13.7	850.3282	0.4136133	Berberich.
230 13 39.6	3 57 7.7	14 49 58.8	849.6718	0.4138369	Berberich.
246 23 45.1	6 37 27.3	2 31 41.4	563.6312	0.5326744	Berberich.
188 3 30.6	7 51 32.7	17 0 44.2	879.0133	0.404008	Berberich.
9 0 42.8	5 0 17.4	12 22 39.2	1066.4426	0.348046	Witt.
70 19 25.1	11 15 54.4	1 57 21.5	660.6148	0.4867056	Berberich.
99 33 41.2	8 12 20.8	6 22 47.8		0.442882	P. V. Neugebauer
61 44 9.2	4 4 24.3	3 26 47.8	724.2913	0.460062	Pourteau.
312 6 53.5	19 37 42.9	5 53 54.4	722.4562	0.460797	Pourteau.
298 57 20.1	5 8 14.6	6 53 23.4	693.666	0.4725708	Berberich.
17 29 37.6	6 13 32.7	10 15 44.4	1009.005	0.364076	Villiger.
220 16 20.5	9 30 55.5	7 5 38.8	842.413	0.416321	Berberich.
250 0 10.6	14 33 20.9	14 55 51.9	743.475	0.452494	Berberich.
17 1 48.2	1 49 14.5	10 30 56.1	642.247	0.494870	Kreutz.
88 37 32.4	12 7 37.7	8 24 45.4	973.3410	0.3744944	Berberich.
303 37 3.5	10 49 41.2	12 52 58.8	2015.0581	0.1638127	Witt.
174 44 5.3	22 30 11.2	4 13 50.9	1308.6711	0.2887841	Berberich.
23 9 37.1	1 50 18.7	8 53 54.8	925.2776	0.3891563	Berberich.
352 3 5.4	18 36 7.8	4 45 46.3	622.0996	0.5040978	Berberich.
263 43 57.1	7 22 52.2	14 16 23.4	962.0481	0.3778732	Berberich.
49 27 2.4	7 14 50.7	2 57 7.6	869.450	0.407174	P. V. Neugebauer
202 36 22.0	19 7 7.5	4 11 33.9	640.6167	0.495606	Coddington.
292 31 23.3	I 35 48.6	6 11 19.0	1079.355	0.344562	Coddington.

Nr. und Name	Opposit 1911		$m_{_{\mathrm{o}}}$	g		poche)skula		Mittl. Äqu.		M			w	
441 Bathilde	Aug. 9	12.8	12.5	9.0	1898	Dez.	14.0	1910.0	345°	51	15.9	197°	38	38.4
442 Eichsfeldia	Sept. 1	12.3	12.1					1900.0						
443 Photographica			12.5					1910.0						
144 Gyptis	-	"	11.2					1910.0						
445 Edna	Dez. 28	12.3	12.6					1910.0						
446 Acternitas	März 12	12.0	11.4					1910.0						39.1
447 Valentine		-	12.1	8.2	1904	Okt.	10.0	1910.0	345	51	50.7	316	23	5.9
448 Natalie	Dez. 27	13.9	13.4	9.3	1899	Nov.	29.5	1910.0	47	48	18.5	292	17	12.2
449 Hamburga			12.0					1910.0						
450 Brigitta			13.2					1910.0						
451 Patientia								1910.0						
452 Hamiltonia 🕟								1910.0						
453 Tea														
.154 Mathesis	Dez. 26	11.9	11.6	8.5	1900	April	128.5	1910.0	352	56	10.1	174	34	18.7
455 Bruchsalia	Jan. 7	11.9	11.6	8.3	1907	Febr.	17.0	1910.0	124	2 6	46.8	269	25	10.9
456 Abnoba														
457 Alleghenia								1910.0						
458 Hercynia								1910.0						
459 Signe	April 21	14.7	13.7	10.5	1900	Okt.	22.5	1910.0	348	14	27.2	17	55	45.7
460 Scania	Febr. 7	14.2	13.9	10.5	1900	Okt.	22.5	1910.0	14	38	31.6	163	33	0.4
461 Saskia	Sept. 19	14.3												
462 Eriphyla	_	-						1910.0						
463 Lola	-							1910.0						
464 Megaira			12.2	8.6	1901	Jan.	9.5	1910.0	92	54	0.7	252	34	33.5
465 Alekto	Dez. 32	13.9	13.5	9.3	1901	Jan.	23.5	1910.0	293	53	59.6	272	32	36.6
466 Tisiphone								1910.0						
467 Laura								1910.0						
468 Lina		-	13.1					1910.0						
469 Argentina			12.7					1907.0						
470 Kilia	T		12.9	10.3	1902	Okt.	21.0	1910.0	138	56	9.4	43	50	5 3 ·3
471 Papagena		_												
472 Roma		_	11.5	8.5	1908	Marz	23.0	1910.0	115	27	18.6	295	11	15.8
473 Nolli			13.3	9.5	1901	Febr	.13.5	1910.0	95	13	40.1	57	6	40.8
474 Prudentia								1910.0						
475 ()cllo		-	13.5	10.2	1905	Juni	17.0	1910.0	317	7	14	301	29	56
476 Hedwig								1910.0						
477 Italia	Marz 5	13.1	12.1	9.5	1905	Nov.	3.5	1910.0	45	50	41.6	320	20	13.9
478 Tergeste	Aug. 19													
479 Caprera								1910.0						
480 Hansa	Dez. 27	11.3	11.5	8.3	3 1901	Mai	21.5	1910.0	179	II	3.11	196	39	14.2

Ω i g μ Log. a Autorität	
254° 20' 3.7 8° 7' 11.7 4° 37' 18.6 753.698 0.448538 Coniel.	
293 31 41.4 21 23 34.9 11 57 45.5 624.2829 0.503084 Coddington.	
42 40 49.5 10 39 3.8 7 7 3.2 761.5980 0.4455205 Pauly.	
72 27 11.5 4 49 5.6 2 40 14.9 686.5435 0.475559 Kreutz.	
38 52 17.9 12 41 52.5 9 54 2.5 636.068 0.497668 Berberich.	
85 58 49.8 3 6 4.6 10 3 32.4 870.9880 0.406664 J. Möller.	
15 37 54.5 10 23 9.4 5 21 56.4 677.749 0.479292 Paetsch.	
89 51 4.6 15 14 39.9 4 19 46.7 662.60440 0.4858348 E. Grabowski.	
92 51 38.8 3 13 15.1 1 13 23.3 736.622 0.455174 Palmer.	
11 34 23.4 5 34 28.0 6 14 36.0 1099.965 0.339085 Hessen.	
32 41 20.7 6 19 18.7 6 19 30.5 832.9439 0.419594 Milham.	
77 26 56.4 12 1 45.3 16 59 20.2 818.8400 0.4245384 Berberich.	
229 44 19.0 14 26 8.9 10 26 41.9 763.4835 0.4448046 Berberich.	
250 46 42.0 12 52 29.5 10 20 2.3 651.8517 0.490572 Paetsch.	
136 4 46.1 12 36 10.3 14 8 5.4 685.852 0.475851 Riem.	
29 49 51.8 10 22 44.4 12 19 50.0 832.007 0.419920 Bauschinger.	
205 45 2.7 4 35 26.1 5 53 49.8 791.305 0.434442 Bauschinger.	
203 43 201 3 33 49.0 /91.303 3.43444 17.11.11.11.11.11.11.11.11.11.11.11.11.1	
156 40 56.9 1 22 20.6 11 54 22.6 624.571 0.502950 Bauschinger.	
105 51 10.2 3 10 27.9 4 45 25.7 727.9361 0.4586089 Berberich.	
36 34 17.3 13 29 59.6 12 42 56.7 960.910 0.378216 Berherich.	
103 51 32.4 10 51 46.9 14 39 57.7 742.582 0.452841 Berberich.	
305 33 19.5 4 37 48.6 13 45 49.7 622.160 0.504070 Bauschinger.	
291 49 53.9 19 16 2.2 4 45 26.8 576.785 0.525995 Berherich.	
323 56 20.1 6 24 26.3 6 20 17.4 704.103 0.468247 Berberich.	
22 26 55.3 0 29 45.3 11 47 14.8 637.306 0.497106 Bauschinger.	
335 11 17.5 11 45 15.4 8 58 51.8 626.309 0.502146 Lamson.	
173 15 58.1 7 13 35.5 5 29 58.5 952.3542 0.380805 Kreutz.	
84 53 56.1 14 51 29.5 13 9 45.7 722.6458 0.4607207 Strömberg.	
127 1 58.8 15 51 45.3 5 37 39.1 875.7359 0.405089 Zappa.	
333 35 9.8 27 46 32.2 14 48 41.2 690.051 0.474084 Berberich.	
162 55 11.4 7 32 22.0 8 27 23.1 916.700 0.391853 Berberich.	
35 53 33 18 38 42 22 22 4 848.6730 0.414177 Ströngren.	
286 41 44.8 10 56 39.3 4 16 2.1 823.2035 0.4229996 Strömgren.	
10 44 48.5 5 18 41.0 10 57 18.2 944.572 0.383182 G. Abetti.	
234 47 14.1 13 9 38.6 4 58 6.5 677.025 0.4796008 de Mello e Sin	as.
136 31 40.9 8 39 23.8 12 42 44.4 788.048 0.435636 Bauschinger.	
237 12 44.8 21 4 48.4 2 25 49.4 826.814 0.421732 Bauschinger.	

	1						-							
Nr. und Name	Opposit		1110	g		Spoche		Mittl.		M			w	
	1911	Gr.			und	Oskula	ition	Äqu.						
.0- 73 4			- (0.					c		."		,	"0
481 Emita	Jan. 24			8.2	1907	Marz	9.0	1910.0	104	59	56.4	345	50	34.8
482 Petrina			12.0		1902			1910.0						
483 Seppina	Sept. 22	,	12.5		1906			1910.0						
484 Pittsburghia	Juni I		12.9		1906			1910.0						
485 Genua	April 27	11.0	11.4	8.0	1904	Okt.	3.5	1910.0	294	18	38.9	208	33	3.0
486 Cremona	Dez. 21	14.0	12.5	11.0	1002	Mai	28.5	1910.0	16	33	5.1.5	125	7	57.5
487 Venetia	Aug. 29		11.8					1910.0						
488 Kreusa	—	_	11.5	7.3	1906	Jan.	0.5							
489 Comacina .	_	_	12.5		1902									
490 Veritas	März 22		12.3		1902									
•							5 5		٥,		.,	,		
491 Carina	März 2 6	12.8	12.5		1903		0.0		340	41	39.1	225	2	45.0
492 Gismonda .	März 21	13.8	13.1					1910.0			28.0			
493 Griseldis	-	_			1902			1910.0						
494 Virtus	Juni 26	11.9	12.3		1902									
495 Eulalia	_	<u> </u>	12.5	9.7	1902	Nov.	21.5	1910.0	20	56	40.0	200	0	35.6
496 Gryphia	Juli 28				T002	N'								.0.
497 Iva	Juli 11				1902			-						
498 Tokio	Dez. 30				1902			1910.0			34.8			
499 Venusia	Jan. 25		11.2 13.0		1904 1903			1910.0			1.5			
500 Selinur ·	Jan. 25		13.0		1903			1910.0			52.0 4.6			
500 Bennar			12.0	0.9	1903	Matr	4.5	1910.0	99	39	4.0	71	40	10.3
501 Urhixidur .	Juni 18	12.8	13.0	8.8	1903	Jan.	19.5	1910.0	119	32	12.0	346	41	52.2
502 Sigune	Mai 16				1907			1910.0			40.1			
503 Evelyn	_	_	12.3	9.0	1903	April	25.5	1910.0			22.7			
504 Cora	Juli 19	11.7	12.7	9.3	1907	Sept.	25.0	1910.0			10.2			
505 Cava	Aug. 5	12.2	12.0	8.7	1907	Okt.	15.0	1910.0	321	50	49.2	33 3	59	2.7
506 Naulan	C	6		0 -		12.1								
506 Marion	Sept. 7				1903		-	1910.0			14.1			
507 Laodica	Juli 26		12.5		1903			1910.0						
508 Princetonia	Nov. 1	-	12.3		1903			1910.0			0.9			
509 Iolanda	Dez. 29		11.5		1906			1910.0						
510 Mabella	März 20	13.1	13.0	9.8	1903	Juli	18.5	1910.0	338	I	0.1	87	40	58.5
511 Davida	Dez. 4	8.4	9.6	5.4	1902	Aug.	15.5	1910.0	182	32	42.8	320	10	55.8
512 Taurinensis	_ '							1910.0						
513 Centesima .	Febr. 23	12.5	12.3	8.4	1003	Okt.	24.5	1010.0	327	27	30.5	208	58	33.7
514 Armida	Febr. 1	12.5	12.4	8.4	1006	Febr.	22.0	1010.0	136	47	7.0	106	2	52.0
515 Athalia								1910.0						
ETG Ambre 4	full a										-			
516 Amherstia .		10.2	11.0	7.7	1908	NOV.	18.5	1910.0	189	0	21.8	254	0	0.4
517 Edith	- 01:t 28	70 -	13.1	9.0	1903	ORt.	25.5	1910.0	339	41	33.4	125	52	30.5
518 Halawe		12.7	13.4	10.5	1903	OKt.	20.5	1910.0	47	47	29.0	118	29	22.7
519 Sylvania								1910.0						
520 Franziska .	Lybu119	14.4	113.9	10.0	1903	OKt.	27.5	1910.0	355	18	52.9	10	18	2.0

Ω	i	g	μ	Log. a	Autorität
			,,,,		
67° 5′ 43.9	9°52′33.4	9° 10′ 37″.1	782.8688	0.437545	Osten.
180 20 8.8	14 27 21.8	5 18 49.8	683.838	0.476703	P. V. Neugebauer.
175 32 15.8	18 37 40.3	2 59 43.4	557.6847	0.535745	Paetsch.
127 26 45.0	12 29 12.2	3 23 42.7	813.1477	0.4265580	Berberich.
194 22 25.9	13 48 10.4	10 57 57.6	777.060	0.439700	P. V. Neugebauer.
94 11 26.5	11 6 47.3	9 20 22.6	977.329	0.373311	Berberich.
115 5 36.2	10 14 21.3	4 56 30.7	813.33738	0.4264906	Bianchi.
86 39 37.2	11 36 16.3	9 21 6.0	633.233	0.498962	Morgan.
167 37 5.1	13 24 57.5	3 47 16.7	634.671	0.498305	Berberich.
179 15 21.1	9 13 7.2	5 7 59.7	627.551	0.501572	Műnch.
176 1 20.6	18 56 44.4	3 42 55.3	620.5529	0.504821	Lassen.
47 13 18.7	I 39 33.0	10 34 19.0	649.105	0.491795	Hessen.
358 41 15.8	15 25 42.0	9 17 51.5	641.417	0.495244	Berberich.
39 4 55.2	7 8 37.6	3 37 33.6	688.142	0.474886	G. Abetti.
186 27 59.0	2 14 13.1	8 28 23.6	910-120	0.393938	P. V. Neugebauer.
206 45 14.2	3 37 6.6	4 15 29.6	1103.453	0.338168	Berberich.
7 1 39.4	4 53 46.0	17 25 44.2	740.971	0.453470	Berberi c h.
98 1 47.9	9 33 4.0	12 47 51.8	823.2586	0.422980	P. V. Neugebauer.
256 45 22.3	2 0 25.2	13 34 32.1	457.624	0.592999	Berberich.
290 29 11.7	9 47 15.7	8 8 23.0	840.020	0.417144	Berberich.
358 4 33.5	20 49 30.8	8 14 41.4	630.916	0.500024	P. V. Neugebauer.
132 41 16.8	25 3 43.4	10 17 7.7	965.064	0.376967	Osten.
69 31 24.1	5 3 33.4	10 12 32.5	788.475	0.435479	Liebmann.
105 17 44.1	12 56 51.7	12 28 13.5	790.4529	0.434754	Osten.
91 8 46.2	9 47 29.5	14 6 50.2	805.8993	0.429151	Osten.
313 36 55.5	16 53 18.3	8 19 48.2	669.497	0.482839	Berberich.
295 14 4.1	9 33 26.6		632.696	0.499208	Bauschinger.
45 20 39.5	13 24 2.0		631.586	0.499716	Berberich.
218 26 48.9	15 22 46.1		660.724	0.486658	P. V. Neugebauer.
203 33 10.2	9 30 37.0			0.417520	Berberich.
108 50 30.7	15 50 35.0	11 8 23.3	630.6576	0.500142	Zinner.
107 9 26.7	8 40 0.2			0.337032	Berberich.
185 49 9.3	9 28 24.1		6 0	0.479204	P. V. Neugebauer
270 11 57.9	3 52 8.7			0.4836418	Berberich.
122 6 47.5	2 0 50.7			0.493382	Berberich.
330 26 47.1	13 3 0.9	16 1 27.1	810.64382	0.427451	Fontana.
277 45 24.7	3 9 58.2			0.4950634	A. Kohlschütter.
203 57 40.2				0.401789	Berberich.
45 23 10.7				0.445736	Berberich.
35 5 35.2				0.478180	Götz.

Nr. und Name	Opposit 1911	ion Gr.	m_{\circ}	g		Spo c he Oskula		Mittl. Äqu.		М			w	
521 Brixia	Juni 24	12.7	12.1	8.7	1000	Febr.	2 6.5	1910.0	73	20	45.I	312	31	31.6
522 Helga		12.8				Jan.	-	1910.0		_	_	_	_	-
523 Ada		13.7				Jan.	-	1910.0			2.5			
524 Fidelio		11.9				März		1910.0		-	-	-		_
525 Adelaide		15.2				März		1910.0			2.8			
526 Jena	Juli 23	13.8	13.1	9.0	1909	Febr.	6.0	1910.0						
527 Euryanthe .			12.5			März :		1910.0						
528 Rezia		12.4	12.4	'	-	März		1910.0						
529 Preziosa	4-	12.9	13.0			März		1910.0						
530 Turandot	Aug. 17	11.4	12.4	8.2	1904	April	18.5	1910.0	268	13	53.6	188	19	26.3
531 Zerlina		_	_			April	_	1910.0						
532 Herculina		10.3	-	-	1904		5.5	1910.0						
533 Sara		13.7				April.		1910.0						
534 Nassovia		12.5	12.8			Mai		1910.0						
535 Montague		_	11.8	8.8	1904	Juni	3.5	1910.0	86	4	14.8	58	53	6.4
536 Merapi		11.6	11.7					1910.0						
537 Pauly		-	13.1	-	-	Juli		1910.0						
538 Friederike .		13.1	-			Juli		1910.0						
539 Pamina			13.1			Aug.		1910.0						
540 Rosamunde.	Sept. 29	12.7	12.1	10.0	1904	Aug.	6.5	1910.0	132	2 9	40.5	334	2 0	33.8
541 Deborah		_	12.9	9.4	1904	Aug.	4.5	1910.0	60	42	30.4	349	2 6	1.9
542 Susanna		12.9	12.8	1 / 1				1910.0						
543 Charlotte		-	12.7					1910.0						
544 Jetta			12.6			Nov.		1910.0			27.2			
545 Messalina	Dez. 39	13.1	12.2	8.0	1907	Mai	8.0	1910.0	222	1	28.4	326	2.1	17.4
546 Herodias			12.1	-		Okt.		1910.0						
547 Praxedis	März 26		12.7			Nov.		1910.0						
548 Kressida	Dez. 2					Okt.		1910.0						
549 Jessonda						Dez.		1910.0						
550 Senta	April 26	11.7	11.9	8.8	1906	Febr.	22.0	1910.0	202	36	44.3	42	55	16.4
551 Ortrud														
552 Sigelinde														
553 Kundry			13.7	11.5	1905	Jan.	9.5	1910.0	16	23	30.6	357	50	30.4
554 Peraga	Nov. 20	9.8	10.8	8.2										
555 Norma	März 6	13.2	13.9	9.7	1905	Jan.	14.5	1910.0	2	59	42.0	350	52	47.9
556 Phyllis	Sept. 29	12.5	12.5	9.7	1905	Jan.	16.5	1910.0	15	36	17.7	175	3	52.5
557 Violetta	Okt. 26	13.7	13.7	11.0	1905	Jan.	14.5	1910.0	I	42	52.4	190	0	23.4
558 Carmen	Mai 22	12.4	12.2	8.5	1905	Febr.	9.5	1910.0	41	17	34.4	314	40	14.0
559 Nanon	Okt. 2	12.6	12.3	9.0	1905	April	20.5	1910.0	321	9	51.5	125	30	48.5
560 Delila	Juli 30	14.0	13.4	10.0	1905	März	13.5	1910.0	22	18	46.4	33	12	22.8

SS	i	g	μ	Log. a	Autorität
9° 27 43 3	10 29 22.5	16° 16′ 9.4	780.20191	0.4385331	Millosevich.
119 17 8.3	4 28 18.3	4 32 44.0	513.919	0.559408	Lassen.
262 13 56.0	4 18 47.0	10 8 17.0	694.113	0.472384	Berberich.
327 6 38.6	8 11 46.3	6 24 2.8	825.223	0.422290	Berberich.
25 54 33·5	3 15 5.6	21 46 42.6	581.342	0.523718	P. V. Neugebauer
37 54 21.8	2 8 33.4	8 5 57.9	644.22959	0.4939773	Knopf.
20 46 3.7	9 39 56.4	8 38 46.0	787.582	0.435808	P. V. Neugebauer
51 49 29.5	12 42 51.3	I 8 5.7	566.409	0.531251	Berber ic h.
65 53 19.6	11 3 40.1	5 45 4.2	676.264	0.479926	P. V. Neugebauer
30 9 13.2	8 26 1.0	10 27 17.8	611.920	0.508874	P. V. Neugebauer
97 49 0.0	34 33 0.7	10 54 44.6	756.474	0.447475	Berberich.
08 19 46.1	16 22 36.6	10 6 31.8	768.8133	0.4427907	Gōtz.
80 44 25.0	6 23 16.4	3 25 57.8	685.108	0.476166	P. V. Neugebauer
93 39 56.2	3 19 29.4	5 47 47.7	725.560	0.459556	Bauschinger.
84 45 17.8	6 48 8.9	1 51 11.1	862.724	0.409423	Dugan.
50 56 14.5	19 24 8.1	5 38 12.5	541.600	0.544219	Strömgren.
21 24 30.4	9 46 21.3	13 3 35.4	654.252	0.489508	P. V. Nettgebauer
12 24 22.I	6 36 23.2	9 22 44.9	630.980	0.499994	P. V. Neugebauer
75 38 29.8	6 47 21.6	12 20 17.6	782.672	0.437618	P. V. Neugebauer
02 1 49.9	5 33 15.2	5 3 8.0	1074.237	0.345938	P. V. Neugebauer
68 30 54.8	5 57 29.6	2 33 35.6	751.048	0.449560	P. V. Neugebaner
53 36 20.7	12 2 13.0	8 13 33.7	715.690	0.463521	Berberich.
96 40 42.9	8 26 57.2	9 2 0.8	662.328	0.485955	Berberich.
98 53 17.1	8 19 4.4	8 37 38.8	849.653	0.413843	Berberich.
34 27 2.5	11 11 0.7	10 35 10.4	626.1741	0.5022077	Berberich.
22 0 59.4	14 54 14.2	6 30 4.0	847.004	0.414747	Berberich.
3 29 59.2	16 56 38.9	13 46 3.9	769.074	0.442693	Berberich.
08 6 36.2	3 52 2.4	10 43 4.5	1029.495	0.358255	Berberich.
92 25 37.8	3 55 44 4	14 55 43.6	805.659	0.429237	Berberich.
71 4 28.4	10 6 47.1	12 38 44.0	850.6748	0.4134954	Berberich.
9 2 55.5	0 26 16.7	7 2 31.5	694.369	0.472277	Berberich.
68 49 48.1	7 26 1.8	4 3 57.6	631.413	0.499796	Berberich.
71 58 47.4	5 17 7.4	6 21 40.1	1073.630	0.346101	Berberich.
5 48 6.5	2 56 14.3	8 54 53.0	969.164	0.375740	Abetti.
30 57 4.1	2 38 44.7	8 50 39.9	624.247	0.503100	Berberich.
35 55 15.3	5 14 18.5	5 46 43.4	915.845	0.392123	Berberich.
3 25 59.7	2 31 9.7	5 35 58.3	926.968	0.388628	Berberich.
14 19 47.1	8 21 1.0	2 14 1.0	715.481	0.463606	Berberich.
12 27 18.8	9 18 13.9	3 45 2.0	794.666	0.433215	Berberich.
3 45 8,8	8 тз 39.4	7 5 19.7	778.172	0.439287	Berberich.

Nr. und Name	Oppositi 1911	ion Gr.	$m_{_{\odot}}$	g		poche Oskula		Mittl. Ägu.		M			ω	
	1911				unu	'SK (Cla	11011	Aiju.						_
561 Ingwelde	April 22	140	120	0.7	TOO	Mana	20.5	TO 10 0	6-0			0		-0"-
562 Salome	Juni 18	12.6	13.9	9.7	1905	Appil	30.5	1910.0	07	24	32.0	302	12	
563 Suleika	Ang 21	10.0	TT T	7.8	1905	Moi	20.5	1910.0	241	39	15.7	257	21	3.7
564 Dudu					1905	Mai		1910.0						
565 Marbachia .	3				1905			1910.0						
566 Stereoskopia	Mai 21	12.0	11.5	7.0	1905	Juni	1.5	1910.0	232	36	44.7	303	22	29.6
567 Eleutheria .	Juli 15	13.0	13.1	9.0	1905	Juni	3.5	1910.0	34	48	12.4	149	57	2.9
568 Cheruskia	_		12.3	8.6	1905	Aug.	21.5	1910.0	291	43	54.1	170	31	48.8
569 Misa		=	12.4	9.2	1905	Juli	27.5	1910.0	271	43	15.6	137	54	52.4
570 [1905 QX] .	Juli 22	12.4	12.7	8.1	1905	Aug.	3.5	1910.0	323	12	44.3	139	5	21.5
571 [1905 <i>QZ</i>] .	April 9	15.0	13.8	11.2	1005	Okt.	2.5	10100	245	47	rn 8	22	22	26.0
572 [1905 RB]	Mai 5	13.8	12.0	10.5	1905	Sent.	10.5	1910.0	220	7/	16.1	T08	20	16.1
573 [1905 RC] .	Dez. 10	12.9	13.2	9.2	1905	Sept.	10.5	1910.0	216	7	20.5	28	~Y	17.0
574 [1905 RIJ] .		15.2	14.3	12.0	1905	Sept.	30.5	1905.0	320	22	0.0	7.1	58	58.2
575 [1905 RE] .		14.0	13.5	10.5	1905	Okt.	4.5	1910.0	28	6	33.6	337	56	22.3
576 Emanuela	Xov 27	127	12.77	8.8	1005	Sont	22.5	1910.0						
577 [1905 <i>RII</i>] .	Nov. 15	12.2	12.0		1905	Okt	20.5	1910.0			22.6			
578 [1905 RZ] .			12.0		1905	You	30.5	1910.0	100	29	57.1	341	- 12	10.2
579 [1905 SIJ] .	_	-	11.5	7.6	1905	You.	22.5	1910.0	07	20	16.0	45/	57	17.4
580 [1905 SE] .	Dez. 41			9.6	1006	Febr.	12.5	1910.0	97 31	5 T	18.2	215	T 2	34.5
) -	7	3-3	*3	19.9
581 Tauntonia .	Dez. 46	13.5	13.7	9.4	1905	Dez.	24.5	1910.0	28	33	46.5	320	23	29.0
582 [1906 SO].	Mai 24	13.5	12.6	9.5	1905	Jan.	23.5	1910.0			13.9			
583 Klotilde			13.1		1906	Jan.	0.0	1910.0	295	18	26.6	239	22	21.6
584 [1906 SY].	Mai 5	12.3	11.5	8.9	1906	Jan.	15.5	1910.0	84	5 I	10.1	83	0	39.3
585 [1906 TA] .	Aug. 9	13.4	12.7	10.0	1906	Febr.	16.5	1910.0	7	2 9	29.6	326	I	33.1
586 [1906 TC] .	Jan. 20	12.6	12.9	9.0	1906	Febr.	21.5	1010.0	40	30	30.5	218	56	14.0
587 [1906 TF] .	Aug. 29	15.1	14.3	11.8	1906	März	18.5	1910.0	3		13.5			
588 Achilles	Juli 7	15.0	14.2	7.7	1905	Febr.	22.5	1910.0	43		37.0			
589 Croatia	Jan. 31	12.8	12.7	8.6	1906	März	23.5	1910.0	141		33.1			
590 [1906 <i>TO</i>] .	März 8	13.1	13.1	9.2	1906	April	2.5	1910.0			55.1			
591 [1906 TP] .	Juni 23	12.1	12.5	10.2	1006	März	18 5	1010.0	246	2	0.2	215	2.1	217 0
592 [1906 TS] .	Febr.20	12.8	12.8	8.0	1006	März	23.5	1010.0	102	5 T	512	2.18	31	3/.9
593 [1906 TT] .	Mai 16	12.0	12.4	0.1	1006	März	20.5	1010.0	40	2,	22.4	240	40	20.4
594 [1906 TW].	Sept. 12	15.2	15.0	т1.8	1006	März	30.5	1010.0	326	10	23.4	76	49	76.1
595 [1906 TZ] .	März 4	12.3	12.1	7.8	1906	Mai	18.5	1910.0	291	37	29.7	264	26	33.1
596 [1906 <i>UA</i>] .														
597 [1906 <i>UB</i>] .	Aug. 6	11.6	12.8	0.5	1006	A pril	16.5	1010.0	281	1 9	T4.6	272	20 c Q	41.5
598 [1906 <i>UC</i>] .	April 22	12.1	12.0	8.5	1006	April	16.5	1010.0	161	- 27	14.0	285	20	52.1
599 [1906 <i>UJ</i>] .	Juni 12	11.2	12.4	8.8	1006	April	128 5	1010.0	258	21	51.1	200	40	48 5
600 [1906 UM].	Sept. 8	13.0	12.0	0.8	1006	Juni	22 5	1910.0	1/0	5	44.3	290	3	24.8
/	1	-3.0	1.3.0	9.0	1900	27 (111	44.5	1910.0	14	41	3.5	112	12	34.0

Ω	i	g	μ	Log. a	Autorität
160 33 57.6	1 30 49.2	8 42 31.0	624.357	0.503049	Berberich.
71 41 19.7	11 8 31.6	5 25 14.8	677.324	0.479473	Berberich.
84 55 34.2	10 20 46.8	13 56 47.2	792.084	0.434157	Berberich.
71 19 29.8	18 11 23.1	15 49 3.5	778.746	0.439074	Berberich.
225 54 9.2	10 53 58.1	7 18 40.0	931.272	0.387286	Berberich.
81 31 55.4	5 I 28.0	6 55 16.7	577 ·34 4	0.525714	Berberich.
59 10 18.8	8 59 6.6	4 55 30.7	641.903	0.495025	Berberich.
250 11 39.3	18 21 5.4	9 40 10.3	725.727	0.459489	Berberich.
303 23 10.5	1 17 41.6	10 39 40.4	819.260	0.424390	Hackenberg.
229 45 19.8	1 41 9.4	6 28 5.2	559.597	0.534754	Berberich.
3 24 2.5	5 7 16.2	13 48 56.0	969.479	0.375645	Berberich.
194 51 53.3	9 23 27.6	10 0 31.0	1008.005	0.364362	Berberich.
343 54 36.1	9 52 9.7	6 22 6.9	678.763	0.478859	Berberich.
336 56 23.3	5 41 19.2	14 3 52.9	1045.070	0.353908	Berberich.
349 39 6.8	14 54 14.6	6 58 24.8	866.098	0.408293	Berberich
300 12 40.5	10 12 1.3	10 59 27.9	672.075	0.481725	Berberich.
331 16 20.9	5 16 23.6	8 17 18.0	644.417	0.493893	P. V. Neugebauer
30 35 21.5	6 11 45.6	11 9 8.7	775.472	0.440294	Kreutz.
83 21 40.4	11 2 4.4	4 35 58.0	677.103	0.479568	P. V. Neugebauer
99 40 3.9	3 40 33.0	7 38 52.2	618.613	0.505726	P. V. Neugebauer
103 8 5.6	21 55 39.1	2 30 51.4	615.963	0.506968	Morgan.
155 39 3.4	29 57 18.6	13 4 0.2	837.303	0.418083	Berberich.
261 26 58.1	8 17 15.3	8 31 10.8	629.074	0.500870	Osten.
282 44 25.6	10 50 13.4	14 24 37.0	962.562	0.377718	P. V. Neugebauer
180 14 3.6	7 30 54.9	7 29 19.0	937.316	0.385414	P. V. Nengebauer
231 1 22.4	1 35 36.2	4 27 6.5	674.790	0.480558	P. V. Neugebauer
324 13 40.9	25 1 30.4	9 29 40.6	995.965	0.367842	Berberich.
315 34 34.0	10 16 37.5	8 10 14.6	294.703	0.720415	Bidschof.
178 44 4.8	10 47 14.6	2 54 51.2	640.839	0.495506	P. V. Neugebauer
106 47 6.7	11 9 39.0	3 53 41.4	684.296	0.476508	Berberich.
334 51 31.5	12 33 50.6	12 1 41.4	807.88τ	0.428440	Berberich.
169 15 27.2	10 6 31.5	7 1 12.3	676.021	0.480030	P. V. Neugebauer
76 18 2.1	17 0 16.1	12 17 10.9	799.698	0.431387	Berberich.
155 23 47.7	32 45 44.5	20 27 11.7	833.298	0.419471	Berberich.
25 0 50.1	18 21 57.6	4 17 47.8	620.181	0.504992	P. V. Neugebauer
71 7 48.6	14 38 14.8	9 26 11.2	706.587	0.467228	Berberich.
36 16 35.2	10 17 14.7	10 28 40.2	803.648	0.429960	Berberich.
92 29 18.9	12 10 13.6	14 5 50.8	770.503	0.442154	Berberich.
45 33 2.7	16 33 46.0	17 15 7.2	768.430	0.442925	Frederickson.
139 38 9.7	10 11 18.4	3 8 12.2	817.198	0.425120	Hammond und
					Frederickson

(0-)							
Nr. und Name	Opposition 1911 Gr.	m _o	g	Epoche und Oskulation	Mittl. Äqu.	М	ω
601 [1906 UN] . 602 Marianna 603 [1906 TJ] . 604 [1906 TK] . 605 [1906 UU] .	Jan. 29 12.2 Juni 22 14.3	12.1 13.9 1 12.4	8.0 0.9 8.2	1906 Juli 12.0 1907 Jan. 0.0 1907 Jan. 0.0 1906 Febr.16.5 1906 Aug. 28.5	1910.0 1910.0 1910.0	169 19 30.4 82 16 11.2 85 46 42.3	41 36 46.0 155 30 12.8 22 22 2.3
606 [1906 VB] . 607 [1906 VC] . 608 [1906 VD] . 609 [1906 VF] . 610 [1906 VK] .	Okt. 12 13.1 Aug. 31 13.5 Aug. 30 12.9	12.6 14.1 I 12.8	9.0 10. 2 8.9	1906 Sept. 18.5 1906 Sept. 18.5 1906 Sept. 18.5 1906 Sept. 24.5 1906 Sept. 26.5	1910.0 1910.0 1910.0	149 52 0.0 2 17 9.8 104 8 36.7	55 33 48.3 285 42 55.8 69 12 50.4 94 43 37.9 352 44 47.4
611 [1906 VL] . 612 [1906 VN] . 613 [1906 VP] . 614 [1906 VQ] . 615 [1906 VR] .	Juni 10 13.5 Okt. 24 12.8 Dez. 37 13.1	14.6 1 13.0 13.7 1	10.4 9.3 10.2	1906 Nov. 2.5 1906 ()kt. 8.5 1906 ()kt. 14.5 1906 ()kt. 11.5	1910.0 1910.0 1910.0	24 II 21.4 334 44 46.7 333 21 2.4	254 17 51.7 296 32 0.0 60 58 25.9 201 42 34.6 243 35 21.6
616 [1906 VT] . 617 Patroclus 618 [1906 VZ] . 619 [1906 WC] . 620 Drakonia	März 11 13.3 Aug. 15 12.1	12.4	5.9 8.2 9.2	1906 ()kt. 8.5 1907 ()ez. 14.0 1906 ()kt. 25.5 1906 ()kt. 22.5 1906 ()ov. 6.5	1910.0 1910.0	73 I 24.7 33 7 17.6 35 I4 23.9	2 107 53 55.7 7 302 25 48.2 5 235 5 21.8 9 174 46 28.1 1 332 29 0.4
621 [1906 WJ] . 622 [1906 WP] . 623 [1907 XJ] . 624 Hektor 625 [1907 XN] .	Jan. 12 12.1 Febr. 18 12.6 Juni 30 13.2	12.8	10.1 10.0 6.4	1906 Dez. 18.5	1910.0 1910.0 1910.0	19 40 58.6 51 17 38.6 335 47 12.3	253 50 19.2 123 13 4.8
626 [1907 XO] . 627 [1907 XS] . 628 [1907 XT] . 629 [1907 XU] . 630 [1907 XW].	Febr. 3 12.5 Dez. 9 13.1	13.1 12.2 13.8	9·3 9·2 9·7	. 1907 Febr. 21.5 1907 März 7.5 1907 März 12.5 1907 März 7.5 1907 März 12.5	1910.0	211 24 57.4 185 26 16.4 21 17 50.5	4 152 11 26.3 9 213 34 40.0 2 31 40 42.7
631 [1907 YJ] . 632 [1907 YX] . 633 [1907 ZN] . 634 [1907 ZN] . 635 [1907 ZS] .	März 9 14.1 Febr. 17 13.0 März 4 14.0	1 14.5 5 12.9 5 13.1	9.1 9.1	3 1907 April 12.5 1 1907 Juni 5.5 1 1907 Juni 5.5	1910.0	339 21 29. 285 16 53. 273 47 51.	5 248 15 59.6 7 181 45 9.7 4 216 6 7.6
636 [1907 XP] . 637 [1907 YE] . 638 [1907 ZQ] . 639 [1907 ZT] . 640 [1907 ZW] .	Dez. 39 13.0 Febr. 28 13. April 9 12.	14.0 13.5 12.1	9.8 10.1 8.2		1908.0 1908.0	8 19 36. 3 29 54. 3 38 0 32.	0 172 25 44.I 8 125 45 12.0 2 56 25 58.3

Ω	i	φ	μ	Log. a	Autorität
170° 30′ 11.6	16° 2 55.2	6°23′41.5	640.8147	0,4955162	Svoboda.
333 10 21.1	15 54 49.5	16 16 0.1	650.9343	0.490980	Varnum.
	8 7 47.4	8 28 45.5	869.24105	0.407243	Zimmer.
343 40 3.7	, ., .	14 12 14.1	627.395	0.501643	Barton.
12 28 55.2	4 40 7.2				
343 21 36.0	19 40 12.9	7 45 29.6	679.007	0.478756	R. Coniel.
319 2 3.6	8 39 46.5	12 29 1.0	853.184	0.412642	P. V. Neugebauer
286 5 16.5	10 4 37.8	4 32 56.8	737.698	0.454752	P. V. Neugebauer
295 1 36.8	9 23 5.6	6 42 29.1	675.233	0.480369	P. V. Neugebauer
166 26 48.0	4 9 12.5	1 54 54.8	654.955	0.489196	P. V. Neugebauer
21 8 56.5	12 49 15.5	14 21 25.7	658.573	0.487602	P. V. Neugebauer
190 21 36.3	13 18 9.4	7 48 13.9	686.547	0.475558	Hammond.
25 8 49.0	13 18 9.4	15 33 35.2	633.186	0.498984	R. Coniel.
-	J	3 9 6.9		0.465008	P. V. Neugebauer
355 47 15.7	7 44 34.2		712.025 801.678		P. V. Neugebauer
217 34 5.6	7 12 58.7	5 27 29.8		0.430672	
14 0 14.0	2 46 28.3	6 12 12.3	831.720	0.420020	P. V. Neugebauer
356 6 10.9	15 0 22.4	3 40 57.9	868.924	0.407350	P. V. Neugebaue
43 28 35.9	22 3 15.1	8 14 37.9	300.532	0.714644	Heinrich.
111 30 24.9	17 1 46.8	3 27 5.4	622.091	0.504102	P. V. Neugebaue
187 39 15.4	13 38 56.9	4 18 7.3	886.616	0.401514	P. V. Neugebaue
0 18 18.3	7 46 1.1	7 44 31.4	931.23617	0.387298	Stouffer.
67 46 12.3	2 22 7.5	8 44 20.0	646.397	0.493006	P. V. Neugebauer
142 24 53.6	8 38 44.5	14 8 38.8	944.890	0.383084	Hammond.
308 29 59.6	14 11 32.6	6 35 32.0	918.318	0.391343	Kritzinger.
342 0 56.6	18 7 18.3	2 8 23.6	292.584	0.722504	Strömgren.
127 50 8.5	12 11 42.0	13 20 54.2	828.707	0.421070	P. V. Neugebaue
0 (
341 37 38.6	25 25 19.5	13 52 38.1	859.674	0.410448	P. V. Neugebaue
142 51 33.8	6 24 23.7	3 20 20.4	708.465	0.466460	P. V. Neugebaue
112 9 31.8	11 32 38.8	2 36 13.1	860.566	0.410150	P. V. Neugebauer
88 10 36.6	9 22 49.4	9 42 19.8	636.547	0.497450	P. V. Neugebaue
105 16 41.7	13 50 34.2	6 35 43.3	825.166	0.422310	P. V. Neugebaue
225 3 1.6	18 50 0.0	4 36 8.2	761.090	0.445713	P. V. Neugebaue
358 7 33.5	2 15 26.1	11 11 27.9	816.080	0.425516	P. V. Neugebaue
147 54 45.4	10 53 4.1	5 53 13.8	672.022	0.481750	P. V. Neugebaue
134 16 37.2	12 19 26.7	10 49 5.5	666.037	0.484340	P. V. Neugebaue
184 20 14.5	11 1 17.2	4 46 31.6	637.791	0.496886	P. V. Neugebaue
25 24 22 5	7 56 277	0.57.105	714 6800	0.460000	Hall
35 24 23.5	7 56 27.7	9 57 10.5	714.6833	0.463929	Hall.
357 34 2.6	0 20 7.2	1	625.5773	0.502484	Snow.
103 38 18.3	7 41 31.6	9 19 44.3	784.6983	0.436869	Snow.
281 26 7.9	8 36 14.0		681.063	0.477880	P. V. Neugebane
235 58 21.3	13 20 41.9	4 27 25.9	631.6072	0.499707	Kobold.

(94)			DATINALISMIN							CATA .	LIX	D	EIL	
Nr. und Name	Opposit 1911	ion Gr.	m_o	g		lpoche Oskula		Mittl. Äqu.		M		1.7	ω	
641 [1907 ZX] .		-	14.5	12.3	1907	Okt.	13.5	1907.0	316°	4	12.8	16°	14	28.8
642 [1907 ZY] .	Juni 5	13.9			1907			1907.0						
643 [1907 22] .	Mai 10		13.9		1907			1907.0						
644 [1907 AA]	Sept. 30		13.1		1907			1907.0						
645 [1907 AG] .	Juni I				1907			1907.0	284	39	33.0	89	8	41.6
646 [1907 AC] .	Dez. 20	14.8	14.5	12.1	1907	Sept.	18.5	1907.0	13	16	3.9	35	25	9.3
647 [1907 AD] .	0kt. 31							1907.0						
648 [1907 AE].					1907			1907.0						
649 [1907 AF] .	Sept. 7				1907			1907.0						
650 [1907 A.M] .	Dez. 12				1907			1907.0						
651 [1907 AN] .	Juli 8	13.6	13.5	9.6	1907	Okt.	4.5	1907.0	9	56	25.8	349	23	52.7
652 Jubilatrix .			13.3		1907			1907.0						
653 [1907 BK].	Aug. 24		12.9	-	1907			1909.0						
654 Zelinda			11.1		1910			1910.0						
655 [1907 BF] .	Juli 13	12.7	12.6				11.5	1909.0	359	2 9	49.3	279	15	13.5
656 [1908 BU] .	Sept. 14	14.2	13.6	9.5	1908	Jan.	25.5	1908.0	334	23	21.2	321	33	2.4
657 [1908 BV] .			_		1908			1908.0						
658 [1908 BW].					1908			1908.0						
659 Nestor	-		14.4			März		1908.0	240	38	5.1	327	3 I	27.6
660 [1908 CC] .			ro.6		1908			1908.0	221	57	35.9	107	23	10.3
661 [1908 CL] .	Okt. 31	12.7	12.7	8.8	1908	Febr.	26.5	1908.0	20	2 6	7.8	154	47	9.0
662 Newtonia	Jan. 16	14.4	13.3	10.3	1908	April	26.5	1910.0						1.9
663 [1908 DG] .	_		13.0	9.0	1908	Juni	27.5	1908.0	78	4	18.6	308	37	6.3
(64 [1908 DH .		-	14.2	10.0	1908	Juni	27.5	1908.0						28.3
665 [1908 DK].	-	-	12.8	8.7	1908	Juli	27.5	1908.0	40	38	57.9	314	27	8.2
666 [1908 DM].	April24	14.7	13.6	10.5	1908	Juli	27.5	1908.0	314	31	43.3	171	2	1.5
667 [1908 DN].	Febr.10	12.7	13.4	9.2	1908	Ang.	24.5	1908.0	236	16	13.3	304	30	8.7
668 [1908 110] .	Febr. 18	16.1	15.0	11.5	1908	Aug.	21.5	1908.0	358	3	9.6	108	22	10.7
669 [1908 DQ] .	Jan. 22	14.2	13.7	9.8	1908	Aug.	27.5	1908.0	53	59	9.5	99	54	9.0
670 [1908 DR] .	März 26	14.4	13.4	9.9	1908	Nov.	15.0	1908.0	356	26	39.5	191	28	40.9
671 Carnegia								1908.0						
672 [1908 DY].	April 2	13.3	13.3	10.3	1908	Sept.	24.5	1908.0	54	53	25.9	308	21	8.9
673 [1908 Ed] .	April 6	13.0	13.0	9.4	1908	Sept.	24.5	1908.0	265	57	47.I	228	16	8.8
674 Rachel				7.0	1910	März	3.5	1910.0	47	47	16.8	39	1	38.7
675 [1908 DU].	April29	12.2	11.2					1908.0						
676 [1909 FN] .	Aug. 14	11.8	12.5					1909.0						
677 [1909 FR] .								1909.0						
678 [1909 <i>FS</i>] .				9.4	1909	April	10.5	1909.0	77	53	45.8	120	0	50.2
679 Pax	Juli 5	10.4	10.9	7.8	1909	März	9.5	1910.0	100	19	3.7	264	45	23.3
680 [1909 GW].	Nov. 12	13.8	13.2	8.9	1909	Mai	17.5	1909.0	306	45	38.9	237	50	12.3

Ω	i	g	μ	Log. a	Autorität
40 38 27.0	ı° 43 ['] 47 ["] 5	7° 15′ 52.8	1072.478	0.346412	P. V. Neugebauer.
7 21 52.5	8 12 23.4	8 2 31.3	627.201	0.501734	P. V. Nougebauer.
255 22 17.4	13 47 35.6	4 26 16.1	577.5812	0.525596	G. Struve.
108 52 41.9	I 2 20.0	9 18 25.2	841.850	0.416514	Palisa.
0 47 29.7	7 4 16.1	8 56 0.6	620.253	0.504958	Frederickson.
302 54 6.3	6 56 23.4	12 16 10.0	1000.933	0.366401	P. V. Neugebauer.
254 44 6.5	7 18 38.0	11 11 53.9	929.838	0.387734	P. V. Neugebauer.
292 41 59.2	9 59 11.4	12 44 41.0	624.825	0.502832	P. V. Neugebauer.
357 12 59.5	12 46 42.7	16 16 15.1	869.564	0.407136	P. V. Neugebauer.
215 40 20.4	2 33 31.8	10 46 12.3	918.478	0.391292	P. V. Neugebauer.
38 49 59.8	10 45 10.0	5 23 25.2	674.638	0.480624	P. V. Neugebauer.
86 15 29.2	15 43 11.0	7 14 9.8	869.682	0.407097	Hopfner.
133 47 9.9	11 16 46.7	2 46 34.1	679.1475	0.478695	Snow.
278 15 31.2	18 19 28.9	13 15 34.2	1019.2974	0.361137	Millosevich.
130 36 38.9	6 29 29.5	4 51 28.0	686.4657	0.475592	Lamson.
186 15 21.0	0 26 32.3	7 36 45.5	638.477	0.496574	P. V. Neugebauer.
298 13 21.1	10 16 48.2	6 15 55.4	843.374	0.415991	P. V. Neugebauer.
352 11 10.1	1 32 13.5	3 18 45.4	732.015	0.456992	P. V. Neugebauer.
349 57 41.7	4 31 14.7	6 23 59.1	300.785	0.714500	Ebell.
156 37 21.5	15 14 23.6	5 52 48.2	877.992	0.404344	Frederickson.
336 48 24.2	9 20 55.0	2 22 32.7	678.143	0.479124	Stracke.
133 30 23.2	4 6 8.0	12 43 4.0	870.112	0.406954	Daniel.
233 46 58.4	17 45 16.5	8 42 58.5	659.479	0.487204	P. V. Neugebauer.
175 51 38.6	8 31 5.8	14 2 19.2	628.749	0.501020	P. V. Neugebauer.
299 49 27.4	14 38 7.4	9 49 56.3	634.836	0.498231	P. V. Neugebauer.
215 34 41.9	7 34 9.7	13 56 19.3	850.116	0.413686	P. V. Neugebauer.
153 54 14.8	25 16 0.5	9 49 23.3	618.029	0.505998	P. V. Neugebauer.
216 2 50.2	6 48 13.0	13 20 26.6	759.640	0.446266	P. V. Neugebauer.
171 20 12.8	10 54 45.5	6 5 53.4	676.435	0.479854	P. V. Neugebauer.
175 10 26.8	7 32 37.2	11 16 55.6	756.0233	0.447648	Hellerich.
1 40 8.7	7 52 45.8	4 55 25.3	642.815	0.494614	Stracke.
344 2 11.5	11 0 17.5	7 28 2.9	871.386	0.406530	P. V. Neugebauer.
228' 9 40.5	2 49 46.9		750.907	0.449614	Stracke.
58 54 7.2	13 35 36.6	10 57 10.3		0.466572	Bianchi.
263 53 11.9	9 43 10.0	11 41 4.4	769.260	0.442622	Stracke.
151 2 6.1	12 47 37.0		659.867	0.487034	P. V. Neugebauer.
274 26 12.7	8 35 13.8			0.460578	G. Struve.
281 59 4.6	6 0 13.0		854.272	0.412274	Hellerich.
112 53 46.9	24 25 19.4		850.9616	0.413398	Zappa.
40 53 16.7	18 1 16.3	16 9 54.1	624.125	0.503154	Stracke.

 $[1909 \ HN]$.

BAHNELEMENTE DER

- 1909 Sept. 26.5 1909.0 84 9 9.2 285 20 24.6

Nr. und Name	Opposit 1911		$m_{_0}$	9	Epoche und Oskulation		Mittl. Äqu.		M			ω		
(0, [,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Non or	~			T000	Mai		1000 0	205	,	26"0	~ ~ 6°	,	r 0 H
681 [1909 GZ] .														
682 [1909 HA] .														
683 [1909 HC] .														
684 [1909 HD] .														
685 [1909 HE] .	Jan. 23	14.5	13.5	11.2	1909	Aug.	10.5	1909.0	10	1	32.1	1/0	33	44.9
686 [1909 IIF] .	Jan. 8	14.6	13.0	10.6	1909	Aug.	15.0	1910.0	356	24	20.4	85	29	53.0
687 Tinette														
688 Melanie														
689 [1909 HJ] .														
690 [1909 HZ] .														
													_	
691 Lehigh		13.4	12.8	8.9	1909	Dez.	31.0	1910.0	57	52	8.8	296	0	1.9
$[1894 \ BD]$.		-	13.3	11.3	1894	Nov.	1.5	1900.0	337	18	8.4	356	39	18.9
[1901 <i>HD</i>] .	_	-			1910	April	30.5	1910.0	77	42	42	112	5	6
$\begin{bmatrix} 1902 \ JT \end{bmatrix}$. $\begin{bmatrix} 1904 \ OR \end{bmatrix}$.	_			-	1902	Okt.	23.5	1902.0	33	40	54.1	245	30	35.0
[1904 OR] .	_	_			1904	Okt.	3.5	1904.0	357	7	3.9	60	22	31.4
t description				10										
$[1906 \ UT]$.		_						1906.0						
[1906 WA] .		-	13.6	9.5				1906.0						
[1908 CV] .		-	-	-				1908.0						
[1908 DC].			1					1908.0						
[1908 DW].	_				1908	Sept.	21.5	1908.0	19	30	32.5	129	26	55.2

δ	i	g	μ	Log. a	Autorität
179° 2' 24" 7	12 34 11.0	4°46' 49.'3	648.157	0.492218	Stracke.
191 37 25.1	11 28 24.3	9 42 1.0	826.032	0.422006	Stracke.
260 37 20.6	18 29 56.6	2 45 18.5	643.696	0.494218	P. V. Neugebauer.
336 42 54.2	5 29 21.7	I 43 47.9	929.525	0.387831	Stracke.
235 21 32.3	3 38 20.5	11 19 5.6	1061.169	0.349474	Stracke.
244 5 14.7	15 43 11.2	15 27 45.3	852.865	0.412751	Pechüle.
335 11 12.7	15 5 18.2	15 41 12.5	787.428	0.435864	P. V. Neugebauer.
171 12 55.0	10 8 29.3	7 57 50.0	803.148	0.430141	Stracke.
167 50 10.9	5 42 0.6	13 18 21.0	1011.533	0.363352	P. V. Neugebauer.
254 46 9.6	11 11 46.5	10 44 44.4	637.567	0.496988	P. V. Neugebauer.
88 54 34.6	13 1 36.5	7 16 10.8	678.253	0.479076	Reynolds.
72 35 44.3	3 27 48.4	8 33 50.4	1104.735	0.337832	Berberich.
65 4 48	26 32 48	9 18 12	571.903	0.52846	Kromm und Dubosq
80 11 55.9	2 28 7.5	11 54 31.0	637.160	0.497172	Berberich.
301 18 11.1	5 28 38.8	9 4 57.1	642.729	0.494652	Berberich.
180 59 31.4	23 18 33.6	2 59 20.8	691.888	0.473314	Kritzinger.
193 50 5.4	9 15 15.4	8 51 34.8	649.218	0.491744	P. V. Neugebauer.
131 54 59	13 42 15	17 46 19	620.44	0.50487	Hirayama.
209 11 4	19 56 6	6 52 25	612.32	0.50869	Burns, Mc. Kellean.
178 11 33.9	6 17 23.5	27 13 22.8	818.534	0.42464	Palisa.
352 47 2.4	14 29 0.7	4 44 33.6	702.897	0.468744	P. V. Neugebauer.

Planet	m_o	Epocho	Argument der Breite	Ω	i	μ	Log. a
1892 S	13.0	1892 Dez. 17.5	77 35 50	358° 7 42"	3° 27 18	835.80	0.41860
1893 C	13.5	1893 Jan. 23.5	167 48 0	321 27 42		1182.9	0.31804
1893 U	13.0	1893 April 10.5	93 23 42	88 59 54	7 49 6	944.3	0.38330
1893 X	13	1893 März 21.5	112 50 17	72 17 48	I 34 4	423.40	0.61550
1893 Y	13	1893 April 17.5	79 39 46	124 24 8	0 18 4	549-95	0.53980
1894 AW.	12	1894 Febr. 3.5	62 6 12	21 39 36	4 33 42	996.0	0.36781
1896 CU.	12.0	1896 Sept. 3.5	100 46 25	243 53 26	5 51 46		0.47320
1898 DW.	13.5	1898 Nov. 19.5	181 1 17	229 11 55	14 40 58	841.15	0.41675
1898 DX.		1898 Nov. 19.5	182 5 12	227 3 49	22 26 34	589.39	0.51973
1898 DY.	13.5	1898 Nov. 13.5	198 18 19	216 46 18	3 15 55		0.48128
1898 DZ.	12.5	1898 Nov. 17.5	174 26 37	239 40 46	3 53 I	881.73	0.40312
1898 EA.	13	1898 Nov. 13.5	181 15 2	227 33 5	27 23 43	508.71	
1900 FE .	12.5	1900 März 6.5	33 49 36	129 37 12	13 13 24	882.1	0.40300
1900 FL .	14.0	1900 Sept. 28.5	152 4 21	197 51 1	6 39 4	768.78	0.44280
1901 HC.		1901 Nov. 12.5	202 51 49	193 51 50	16 21 55	701.06	0.46950
1901 <i>IID</i> .	_	1901 Nov. 15.5	339 15 43	62 43 50	29 31 43	592.93	0.51800
1902 HY.	_	1902 Juni 2.5	164 42 33	68 13 39	9 0 13	656.86	0.48836
1903 LD.		1903 Jan. 18.5		300 36 51	15 33 1	754.21	0.44834
1903 LXª	-	1903 Sept. 1.5	38 57 42	287 19 24	7 21 12	709.92	0.46587
1903 LZ.	Armi	1903 Aug. 30.5	153 22 42	189 17 0	9 22 0	759.30	0.44640
1903 MC.	-	1903 Sept. 29.5	185 33 38	167 13 30	26 16 59	564.44	0.53225
1903 MD.	-	1903 Sept. 29.5	358 34 29	354 45 52	14 35 22	654.46	0.48942
1903 MF.	-	1903 Sept. 29.5	183 25 53	171 9 13	10 55 45	783.09	0.43746
1903 MM.		1903 Okt. 14.5	181 15 12	195 37 36	4 56 48	714.71	0.46392
1903 MN.	-	1903 ()kt. 24.5	350 9 6	39 35 0	7 51 54	945.90	0.38276
1903 NF .	-	1903 Dez. 18.5	216 0 54	230 11 48	15 16 54	849.85	0.41380
1903 NG .		1903 Nov. 14.5	178 3 42	230 52 18	8 38 12	649.73	0.49152
1904 OD .		1904 Mai 14.9	186 3 33	42 38 38	12 53 11	610.50	0.50954
1904 OP .		1904 Sept. 5.	45 37 34	293 4 6	13 37 4	735.20	0.45572
1904 QW.	_	1904 April 4.5	70 11 57	108 54 13	11 14 22	716.53	0.46318
1905 RN		1905 Okt. 24.5	63 34 0	336 9 12	3 12 42	828.93	0.42100
1906 UK.	1 -	1906 Mai 14.		131 2 1	12 20 4	776.69	0.43984
1906 I'W.		1906 Nov. 11.		207 30 36	9 19 42		
1906 VX		1906 Nov. 11.	000	46 39 30			
1906 W/D	-	1906 Okt. 26.	5 195 49 C	203 7 0	48 8 0	387	0.6595
1907 XV		1907 März 12.		82 27 36			
1907 <i>YR</i>	. —	1907 April 18.	5 85 46 47	97 13 3	6 59 40	470.40	0.58510

 ${\bf Mittleres} \ \ddot{\bf A} {\bf quinoktium} \ {\bf des} \ {\bf Jahresanfangs}.$

OPPOSITIONEN DER KL. PLANETEN FÜR 1911. (39)

N. L. N.	Tag	7		12h Mittl	lere 2	Zeit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	δ δ	$\mathrm{Log.}~\Delta$	Beob- achtung
688 Melanie	Jan. 0	13.9	6 ^h 14.9	+ 8°50	0.9	+ 2	0.306	1909
256 Walpurga	I	13.5	6 45.3	+ 3 53	0.8	+ 1	0.337	1909
384 Burdigala	2	10.9	6 50.1	+30 50	I.I	+ 3	0.118	1909
439 Ohio	2	12.5	6 51.9	- 5 9	0.8	+ 1	0.305	1909
552 Sigelinde	2	12.4	6 52.2	+20 27	0.9	0	0.368	1909
429 Lotis	3	12.3	6 52.8	+ 8 54	0.7	0	0.185	1909
411 Xanthe	3	13.1	6 53.3	+20 37	0.9	+ 5	0.363	1909
199 Byblis	4	13.2	6 58.1	+27 46	0.9	+ 4	0.431	1907
244 Sita	5	13.7	7 4.2	+17 32	1.2	+ I	0.065	1900
630 [1907 XW]	5	13.0	7 4.7	+22 25	1.0	+ 8	0.154	1907
437 Rhodia	6	13.6	7 7.8	+18 11	1.1	0	0.258	1909
419 Aurelia	6	12.3	7 8.0	+17 48	1.0	+ I	0.349	1909
390 Alma	7	12.5	7 11.9	+29 34	1.2	4	0.134	1909
455 Bruchsalia	7	11.9	7 13.5	+31 21	1.1	+ 4	0.271	1907
238 Hypatia	7	11.6	7 14.3	+ 3 54	0.9	+ 2	0.273	1907
686 [1909 HF]	8	14.6	7 15.4	+ 5 39	1.0	— I	0.314	1909
575 [1905 RE]	II	14.0	7 26.8	+42 19	1.3	0	0.264	1909
467 Laura	11	13.9	7 26.9	+27 39	1.0	0	0.242	1901
318 Magdalena	11	13.0	7 28.3	+ 9 36	0.8	+ 4	0.317	1909
138 Tolosa	11	12.6	7 28.6	+26 2	T.I	+ 3	0.261	1909
196 Philomela	12	10.6	7 30.0	+28 17	0.9	+ 3	0.345	1909
622 [1906 WP]	12	12.1	7 30.0	+13 35	1.0	+ 7	0.065	1908
322 Phaeo	12	12.4	7 32.7	+14 2	1.0	0	0.265	1909
137 Meliboca	13	12.8	7 35.9	+ 3 24	0.7	+ 2	0.450	1907
59 Elpis	13	10.9	7 36.6	+10 3	0.9	+ 4	0.238	1909
542 Susanna	13	12.9	7 37.4	+ 9 51	0.8	+ 5	0.301	1909
381 Myrrha	13	12.9	7 38.0	+1744	0.8	+ 4	0.410	1907
19 Fortuna	14	9.6	7 40.0	+1846	I.I	+ 3	0.130	1909
365 Corduba	14	12.0	7 42.0	+ 2 18	0.9	+ 3	0.237	1909
246 Asporina	14	12.2	7 42.0	+ 3 44	0.9	+ 5	0.290	1908
130 Elektra	15	10.5	7 48.5	+ 3 41	0.8	+ 7	0.316	1904
662 Newtonia	16	14.4	7 51.8	+19 8	1.0	+ 4	0.328	1909
586 [1906 TC]	20	12.6	8 8.0	+1752	0.9	+ 2	0.263	1906
402 Chloe	21	10.1	8 11.5	+16 47	0.9	+10	0.115	1909
690 Vratislavia	2.1	12.2	8 13.4	+ 7 45	0.8	+ 1	0.372	1910
522 Helga	22	12.8	8 14.2	+20 6	0.7	+ 3	0.441	1904
334 Chicago	22	12.1	8 14.3	+ 18 29	0.7	+ 3	0.469	1909
669 [1908 DQ]	22	14.2	8 16.9	+ 7 52	0.8	+ 5	0.364	1908
685 [1909 HE]	23	14.5	8 19.2	+14 7	1.1	+ 3	0.226	1909
329 Svea	23	12.2	8 19.5	— 2 4	0.9	+ 7	0.186	1908

(40) OPPOSITIONEN DER KL. PLANETEN FÜR 1911.

N 1 14	Tag			12h Mittle	ere Z	eit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\mathrm{Log}.\Delta$	Beob- achtung
481 Emita	Jan. 24	11.2	8 ^h 26.7	+32°46	m 1.0	+ 6	0.194	1908
344 Desiderata	24	13.0	8 27.1	+44 39	1.2	+ 4	0.383	1909
499 Venusia	25	11.8	8 28.8	+16 47	0.7	+ 3	0.324	1902
41 Daphne	27	10.1	8 36.6	- I 27	0.9	+ 7	0.216	1907
236 Honoria	27	12.0	8 36.8	+ 8 45	0.8	+ 4	0.323	1907
65 Cybele	28	11.3	8 42.2	-15 44	0.7	+ 4	0.420	1909
602 Marianna	29	12.2	8 43.0	+29 7	1.0	0	0.342	1906
*113 Amalthea	30	10.8	8 51.7	+1843	1.0	+ 7	0.115	1909
589 Croatia	31	12.8	8 52.3	+ 5 53	0.7	+ 5	0.338	1909
625 [1907 XN].	31	13.1	8 54.0	+18 27	0.9	+ 6	0.344	1907
272 Antonia	31	13.4	8 56.1	+24 39	1.0	+ 4	0.235	1890
514 Armida	Febr. 1	12.5	8 56.4	+13 20	0.8	+ 3	0.326	1909
333 Badenia	1	13.1	8 58.5	+21 7	0.9	+ 3	0.370	1909
422 Berolina	2	14.3	9 1.9	+2358	1.2	+ 4	0.211	1908
628 [1907 XT]	3	12.5	9 3.3	+23 29	1.0	+ 8	0.231	1909
424 Gratia	4	12.5	9 10.5	+24 3	0.9	+ 6	0.213	1908
177 Irma	6	12.7	9 16.1	17 8	0.9	+ 4	0.280	1906
181 Eucharis	6	10.4	9 19.7	+11 38	0.7	+12	0.196	1906
404 Arsinoë	6	12.6	9 23.0	+32 18	1.0	+10	0.149	1909
173 Ino	7	11.5	9 23.1	11 28	0.8	+ 8	0.300	1909
631 [1907 <i>Y.J</i>]	7	12.0	9 23.2	-15 40	0.8	+ 4	0.222	1909
234 Barbara	7	12.9	9 24.4	+12 52	0.9	+ 9	0.289	1905
460 Scania	7	14.2	9 24.8	+ 8 30	0.9	+ 5	0.279	1909
269 Justitia	8	13.4	9 25.4	+12 29	0.9	+ 6	0.288	1907
667 [1908 <i>DN</i>]	IO	12.7	9 31.0	+ 5 56	0.7	+13	0.252	1908
39 Lactitia	10	9.6	9 31.9	+10 8	0.8	+ 7	0.301	1909
626 [1907 XO]	10	11.7	9 33.4	+-32 59	1.4	- 2	0.230	1907
125 Liberatrix	15	11.4	9 40.9	+10 45	0.8		, ,	1907
363 Padua	15	11.9	9 47.5	+22 42	0.9	_		1907
687 Tinette	16	15.2	9 59.5	+15 56	1.0	- - 1	0.293	1909
633 [1907 ZM]	17	13.6	9 59.9	+12 16	0.8	+ 7	0.372	1909
93 Minerva	17	11.3	10 1.9	+20 48	0.9	+ 3	0.299	1908
21 Lutetia	17	0.11	10 3.0	+16 36	1.0	,	0.266	1909
668 [1908 DO]	18	16.1	10 3.6	+ 2 41	0.8			1908
623 [1907 XJ]	18	12.6	10 4.2	+ 1 45	I.I	C	0.147	1909
539 Pamina	18	13.9	10 5.5	+ 2 59	0.8			1909
* 68 Leto	18	11.4	10 6.3	+23 37	0.9			1909
464 Megaira	_	13.2	10 8.3	+22 46	0.9			1901
592 [1906 TS]	20	12.8	10 15.2	+ 6 13	0.8			1909
635 [1907 ZS]	2.1	12.8	10 19.4	+ 2 0	0.7	+ 7	0.353	1908

OPPOSITIONEN DER KL. PLANETEN FÜR 1911. (41)

	Tag			12h Mittle	ere Z	eit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\text{Log.}\ \Delta$	Beob- achtung
219 Thusnelda 86 Semele	Febr.22	12.5	10 20.3 10 22.5	- 2° 8′ +16 43	0.9	-⊢ 8 + 5	0.279	1908
295 Theresia 513 Centesima 689 [1909 <i>ILI</i>]	23 23 23	13.4 12.5 15.3	10 23.9 10 24.4 10 25.8	+ 6 14 + 2 33 + 7 41	0.9	+ 5 + 6 + 7	0.245	1909 1909
70 Panopaea 638 [1907 ZQ]	26 28 28 28 März 1	11.7 13.1 12.6 14.2 13.5	10 35.0 10 41.0 10 44.3 10 44.5 10 46.0	+26 48 +19 9 +11 22 +10 27 +11 34	0.8 0.5 0.7 0.8	+ 4 + 7 + 1 + 4 + 5	0.308 0.193 0.268 0.463	1909 1908 1908 1909
393 Lampetia	2 3 4 4 5	12.0 12.6 14.0 12.3 13.1	10 51.0 10 55.1 10 56.9 10 59.8 11 0.6	$ \begin{array}{c cccc} -10 & 8 \\ + 2 & 41 \\ +15 & 0 \\ +27 & 23 \\ +10 & 27 \end{array} $	0.8 1.0 0.7 0.9 1.0	+ 7 + 4 + 7 + 3 + 3	0.360 0.286 0.420 0.381 0.272	1908 1909 1907 1910
314 Rosalia	5 5 5 6 8	14.9 13.1 10.8 13.2 12.9	11 3.2 11 3.6 11 3.7 11 6.5 11 10.2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.7 0.9 0.9 0.7 0.8	+ 7 + 6 + 3 + 6 + 6	0.433 0.275 0.165 0.256 0.363	1908 1910 1909 1909
590 [1906 <i>TO</i>]	9 9 10	13.1 13.2 14.1 14.7 11.8	11 11.4 11 16.4 11 17.5 11 19.3 11 21.0	+20 20 13 42 + 5 16 + 1 41 = 5 57	0.8 0.8 0.9 0.9 0.8	+ 7 + 6 + 5 + 6 + 8	0.301 0.292 0.168 0.190 0.323	1906 1906 1907 1903
617 Patroclus 596 [1906 <i>UA</i>] 446 Acternitas 551 Ortrud 96 Aegle	11 12 12 12 12	13.3 11.7 12.0 12.9 10.7	11 24.2 11 25.8 11 27.0 11 28.0 11 30.0	+29 31 +28 10 +17 38 + 3 40 -12 12	0.5 0.9 1.0 0.8 1.0	+ 2 + 5 + 3 + 5 0	0.699 0.263 0.325 0.299 0.227	1910 1909 1907 1909
359 Georgia	13 13 14 14	13.1 11.4 13.1 12.6 12.1	11 32.8 11 33.3 11 34.1 11 34.6 11 35.6	+ 5 45 - 5 9 +21 34 - 9 32 + 3 23	0.9 0.8 0.9 1.0 0.8	+ 4 + 4 + 10 + 3 + 5	0.333 0.234 0.324 0.212 0.273	1906 1910 1906 1908 1909
74 Galatca	14 17 17 17 17	12.9 11.5 11.9 11.3 10.5	11 36.4 11 45.4 11 45.5 11 47.5 11 47.8	+ 0 4 + 4 48 + 1 22 - 7 4 - 1 28	0.8 0.9 1.0 0.8 0.9	+ 5 + 3 + 6 + 5 + 6	0.383 0.331 0.210 0.306 0.205	1910 1910 1907 1908 1909

(42) OPPOSITIONEN DER KL. PLANETEN FÜR 1911.

Nr. und Name	Tag	CI			Letzte Beob-			
obline Line	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\text{Log.}\Delta$	achtung
29 Amphitrite	März 19	9.3	11 ¹ 53.8	+ 0 35	m I.I	+-5	0.217	1910
189 Phthia	19	11.8	11 53.9	-36	0.9	8	0.189	1908
510 Mabella	20	13.1	11 57.7	- 6 7	0.8	+8	0.233	1908
11 Parthenope	20	9.6	12 0.0	+ 6 29	0.9	+5	0.209	1909
316 Gobe rt a	21	13.4	12 0.6	+ 2 54	0.7	-+-5	0.352	1891
691 Lehigh	21	13.4	12 1.2	+19 58	0.8	+5	0.375	1910
492 Gismonda	2.1	13.8	12 2.5	+ 1 34	0.7	+5	0.415	1904
490 Veritas	22	12.7	12 3.3	+ 0 3	0.7	+7	0.391	1910
336 Lacadiera	23	11.7	12 10.0	- 9 47	0.9	+8	0.080	1906
547 Praxedis	26	13.7	12 15.6	-523	0.7	+9	0.373	1908
3.,								
171 Ophelia	26	11.6	12 15.8	+ 2 33	0.8	+5	0.262	1906
671 Carnegia	26	13.2	12 16.8	— 2 33	0.8	+3	0.333	1908
670 [1908 DR]	26	14.4	12 19.7	- 0 11	0.7	6	0.371	1910
491 Carina	26	12.8	12 20.5	+ 2 8	0.7	+9	0.373	1908
283 Emma	27	12.5	12 20.5	-13 9	0.8	-1-4	0.399	1908
275 Sapientia	27	11.0	12 24.5	+ 4 16	1.0	+6	0.129	1909
431 Nephele	28	13.2	12 25.1	- 0 8	0.7	+5	0.401	1910
*153 Hilda	28	12.6	12 28.0	—10 1 6	0.6	+5	0.463	1910
* 79 Eurynome	30	11.3	12 33.8	- 5 55	0.9	+7	0.253	1909
258 Tyche	30	12.1	12 35.7	10 27	0.7	+-8	0.332	1908
339 Dorothea	31	13.1	12 36.1	+ o 1	0.7	+7	0.350	1907
152 Atala	31	12.3	12 36.9	+73	0.8	+2	0.340	1905
427 Galene	31	13.0	12 37.3	-11 57	0.8	+-4	0.317	1908
38 Leda	April I	11.3	12 40.2	16 4	0.9	-1-5	0.230	1906
294 Felicia	1	14.9	12 41.4	+ 3 5	0.8	-1-6	0.393	1910
405 Thia	2	9.4	12 43.2	-27 16	0.7	+8	9.987	1909
109 Felicitas	2	12.8	12 44.4	- 6 34	0.9	-+-3	0.327	1907
640 [1907 ZW]	2	12.8	12 44.9	-18 50	0.7	+-8	0.315	1907
672 [1908 DY].	2.	13.3	12 45.0	14 53	1.0	+2	0.195	1908
297 Caecilia	3	13.6	12 47.2	—12 50	0.8	+-3	0.376	1907
92 Undina	3	11.3	12 47.8	+10 5	0.7	4	0.382	1908
237 Coelestina	5	12.8	12 54.9	- -10 I	0.8	-+-4	0.250	1901
673 [1908 EA]	6	13.0	12 57.6	- 8 40	0.8	1-6	0.260	1910
103 Hera	6	10.5	12 59.5	+ I 20	0.8	+6	0.262	1908
127 Johanna	6	10.4	13 0.1	_ 2 18	0.9	-i-3	0.228	1909
3 Juno	8	9.5	13 6.1	1 48	0.8	+8	0.326	1909
158 Koronis	9	12.6	13 8.7	-+ 8 55	0.8	-+-5	0.298	1908
571 [1905 QZ]	9	15.0	13 10.0	9 47	1.0	+4	0.286	1905
639 [1907 ZT]	9	12.5	13 10.5	20 44	0.8	-1-5	0.346	1910
279 Thule	10	13.9	13 13.8		0.6	3	0.525	1906

OPPOSITIONEN DER KL. PLANETEN FÜR 1911. (43)

	Tag			12h Mittle	ere Z	eit		Letzte
Nr. und Name	der Öpp.	Gr.	AR.	Dekl.	Δα	Δδ	${\rm Log.}~\Delta$	Beob- achtung
302 Clarissa	April 13	14.3	13 23.3	-10°21	1.0	+ 4	0.205	1907
105 Artemis	15	10.1	13 29.2	- 2 15	0.7	+20	0.014	1908
271 Penthesilea . •	15	13.3	13 30.3	-13 34	0,6	+ 3	0.364	1903
300 Geraldina	16	12.6	13 33.9	- 9 27	0.7	+ 4	0.356	1906
128 Nemesis	17	11.3	13 40.2	- 2 36	0.8	+ 3	0.321	1908
33 Polyhymnia	17	12.7	13 40.3	—1I 2O	0.8	+ 4	0.371	1904
317 Roxane	19	12.4	13 45.3	— 8 IO	1.0	+ 6	0.144	1908
525 Adelaide	19	15.2	13 45.4	- 6 27	0.7	+ 4	0.534	1904
520 Franziska	19	14.4	13 46.1	+853	0.8	+ 2	0.359	1906
243 Ida	19	13.5	13 47.5	—12 46	0.8	+ 4	0.291	1906
252 Clementina	20	13.3	13 52.5	- 9 48	0.7	+ 6	0.368	1902
459 Signe	21	14.7	13 52.5	-11 49	0.9	+ 1	0.332	1900
106 Dione	21	12.2	13 54.1	7 59	0.8	+ 4	0.430	1910
394 Arduina	21	13.5	13 55.2	= 5 29	09	+ 4	0.304	1906
168 Sibylla	21	12.0	13 56.1	-11 41	0.7	+ 5	0.419	1908
598 [1906 <i>UC</i>]	22	13.1	13 56.5	+ 4 45	0.8	+ 4	0.390	1910
87 Sylvia	2.2	12.2	13 56.5	- 0 17	0.7	- 	0.432	1907
561 Ingwelde	22	14.0	13 57.6	-IO 12	0.8	+ 5	0.354	1905
8 Flora	22	9.8	13 57.8	- I 50	1.0	+ 5	0.194	1909
666 [1908 DM]	2.4	14.7	14 4.5	-13 3	0.8	+6	0.343	1908
350 Ornamenta	2.1	13.3	14 5.2	+20 55	0.8		0.410	1910
110 Lydia	25	10.7	14 9.2	- 9 7	0.9	+ 3	0.265	1908
550 Senta	26	11.7	14 12.2	-27 30	1.0	+ 6	0.186	1910
*122 Gerda	26	11.2	14 13.4	-11 54	0.7	+ 4	0.312	1910
434 Hungaria	27	10.9	14 16.8	+16 18	0.9	+16	9.992	1909
485 Genua	27	11.6	14 17.5	— 5 48	0.7	+ 8	0.269	1909
282 Clorinde	27	13.6	14 19.2	+ I 6	0.9	+ 6	0.170	1908
675 [1908 <i>DU</i>]	29	12.2	14 23.0	-24 23	0.8	+ 6	0.365	1908
250 Bettina	30	11.8	14 26.3	19 25	0.9	+ 1	0.372	1910
341 California	30	13.1	14 27.3	-16 37	1.2	+ 2	0.075	1905
332 Siri	30	12.6	14 28.2	-15 19	0.9	+ 3	0.258	1906
280 Philia	Mai 2	14.7	14 36.9	-21 24	0.9	2	0.328	1890
519 Sylvania	3	12.4	14 38.8	-14 26	0.9	+ 1	0.297	1903
191 Kolga	4	12.5	14 43.4	- 0 29	0.8	5	0.337	1907
120 Lachesis	4	11.4	14 43.5	-25 49	0.9	+ 2	0.285	1908
228 Agathe	5	14.5	14 46.3	-20 59	1.1	- - 5	0.080	1908
584 [1906 SY]	5	12.3	14 47.4	−3 ° 53	1.1	-+- 5	0.247	1906
572 [1905 RB]	5	13.8	14 49.3	- 8 46	0.9	8	0.232	1905
141 Lumen	6	12.3	14 52.1	-34 59	1.1	- - 3	0.324	1901
421 Zähringia	7	15.5	14 55.9	- 9 36	0.9	- - 5	0.352	1908

(44) OPPOSITIONEN DER KL. PLANETEN FÜR 1911.

N LN	Tag	G		12h Mittle	ere Z	eit		Letzte Beob-
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\text{Log.}\Delta$	achtung
415 Palatia	Mai 7	12.9	14 58.0	- 5° 13′	0.8	+ 3	0.409	1910
54 Alexandra	8	10.3	14 58.1	37 44	1.1	- - 3	0.156	1909
324 Bamberga	8	10.8	15 1.0	-34 6	1.0	+ 3	0.343	1909
347 Pariana	9	11.3	15 3.7	3 35	1.0	. 0	0.129	1907
643 [1907 ZZ]	10	14.2	15 4.9	-25 57	0.8	+ 5	0.405	1908
186 Celuta	10	11.4	15 8.1	-32 8	1.2	_ 2	0.131	1908
117 Lomia	II	11.5	15 12.4	-38 41	1.0	I	0.323	1907
528 Rezia	12	12.4	15 12.7	17 32	0.8	0	0.389	1910
391 Ingeborg	13	13.8	15 16.8	-62	1.0	+13	0.198	1908
179 Klytaemnestra	13	11.8	15 17.6	-22 29	0.8	+ 5	0.324	1908
601 [1906 <i>UN</i>]	14	12.6	15 20.1	+ 2 33	0.7	+ 5	0.327	1909
502 Sigune	16	13.6	15 27.9	+-25 29	I.O	2	0.141	• 1907
242 Kriemhild	16	12.8	15 29.8	II 20	0.8	⊣ − 6	0.289	1906
593 [1906 TT]	16	12.9	15 32.2	-837	I.O	- I	0.295	1909
327 Columbia	20	12.7	15 45.8	-30 31	1.0	+ I	0.222	1903
151 Abundantia	20	11.8	15 46.2	-23 45	1.0	0	0.188	1904
231 Vindobona	20	11.4	15 46.6	-28 5	0.7	2	0.169	1902
566 Stereoskopia .	21	12.0	15 47.7	17 14	0.8	+ 2	0.425	1910
104 Klymene	21	12.9	15 48.6	-2I 1I	0.8	+ 2	0.417	1910
379 Huenna	21	12.8	15 48.7	-17 50	0.8	+ 3	0.347	1909
412 Elisabetha	21	11.7	15 49.1	- 2 53	1.0	1	0.224	1906
414 Liriope	22	13.8	15 49.8	- 9 3	0.8	+ 2	0.453	1910
342 Endymion	22	13.3	15 52.4	-1844	0.9	+ 5	0.258	1907
558 Carmen	22	12.4	15 54.7	7 30	0.8	- 3	0.300	1910
112 lphigenia	24	11.5	16 4.6	25 20	1.0	+ 3	0.149	1906
58 2 [1906 SO]	24	13.5	16 4.9	+23 14	0.9	+ 2	0.330	1910
6 Hebe	25	9.2	16 6.7	+ 2 19	0.9	+ 2	0.244	1910
116 Sirona	25	10.6	16 7.9	-20 52	1.0	+ I	0.231	1906
289 Nenetta	25	12.9	16 8.2	-12 16	0.9	+ 4	0.326	1909
107 Camilla	26	11.4	16 8.3	— 8 1 6	0.7	+ 3	0.423	1910
159 Aemilia	27	12.6	16 16.0	-12 56	0.8	+ 2	0.365	1906
301 Bavaria	28	12.3	16 18.3	-I3 25	0.9	+ 2	0.191	1903
674 Rachel	28	11.5	16 18.7	-24 11	0.9	- I	0.373	1910
546 Herodias	28	12.4	16 21.1	-396	1.2	0	0.240	1910
574 [1905 <i>RD</i>]	29	15.2	16 23.7	-31 43	1.2	+ 3	0.220	1905
40 Harmonia	30	9.3	16 24.0	-18 12	I.I	+ 1	0.112	1907
395 Delia	30	12.3	16 28.7	-22 59	0.9	+ 4	0.164	1903
484 Pittsburghia .	Juni I	12.8	16 36.1	4 28	0.9	0	0.207	1907
645 [1907 AG]	T	14.2	16 37.4	-3126	0.9	+ I	0.424	1910
56 Melete	2	10.0	16 39.8	- 9 13	1.1	+ 6	0.046	1907

OPPOSITIONEN DER KL. PLANETEN FÜR 1911. (45)

	Tag			12h Mittle	ere Z	eit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\mathrm{Log.}\Delta$	Beob- achtung
III Ate	Juni 3	11.7	16 ^h 43.9	-28°36	m I.O	+3	0.252	1910
81 Terpsichore	4	12.7	16 48.2	-33 15	1.0	+I	0.373	1903
642 [1907 ZY]	5	13.9	16 51.3	33 20	0.9	+1	0.388	1910
148 Gallia	5	11.8	16 52.5	+12 46	0.8	0	0.358	1910
123 Brunhild	5	12.4	16 52.9	-30 22	1.0		0.305	1905
357 Ninina	6	12.4	16 55.0	- 2 41	0.8	0	0.363	1910
549 Jessonda	8	14.6	17 1.3	-26 2	0.9	2	0.371	1910
9 Metis	8	9.5	17 2.2	-23 47	1.1	0	0.221	1910
100 Hekate	9	11.1	17 5.3	-14 14	0.8	0	0.228	1910
18 Melpomene	9	9.7	17 5.8	- 6 20	1.0	0	0.166	1907
131 Vala	10	11.8	17 8.6	24 56	1.0	_I	0.107	1908
612 [1906 IN]	10	13.5	17 11.5	−5 ○ 45	1.3	-3	0.213	1906
10 Hygiea	12	8.9	17 19.4	25 41	0.9	+2	0.249	1910
599 [1906 <i>UJ</i>]	13	11.2	17 22.6	-4º 57	1.3	-7	0.124	1910
278 Paulina	14	12.3	17 27.0	-2748	1.0	-2	0.186	1908
335 Roberta	14	10.5	17 30.5	-14 10	0.9	0	0.021	1907
15 Eunomia	15	9.0	17 30.5	-32 40	1.1	-1-3	0.269	1910
185 Eunike	15	10.7	17 32.2	+10 17	0.9	- I	0.288	1910
286 Iclea	16	13.3	17 37.1	+ 0 19	0.8	1	0.356	1910
407 Arachne	16	11.9	17 37.2	-29 29	1.0	-3	0.220	1908
536 Merapi	18	11.6	17 42.2	35 33	0.9	-4	0.388	1910
501 Urhixidar	18	12.8	17 43.6	54 12	1.3	0	0.320	1910
361 Bononia	18	14.2	17 45.4	-38 14	0.8	0	0.573	1909
562 Salome	18	12.6	17 45.9	-27 59	0.9	- 3	0.266	1909
209 Dido	19	11.3	17 47.5	-34 24	0.9	0	0.287	1910
*118 Peitho	10	11.7	17 48.1		1.1	-2	0.260	1910
172 Baucis	20	10.0	17 52.2		1.2	+2	0.001	1910
251 Sophia	20	14.2	17 55.4	0, 00	0.8	0	0.382	1910
60 Echo ·	21	12.0	17 55.6	9 35 17 59	1.0	0	0.257	1908
603 [1906 TJ]	22	14.3	17 59.2	$-35 \ 45$	1.1	+-1	0.246	1910
		10.3					0.185	
45 Eugenia 591 [1906 <i>TP</i>]	23	13.1		-14 14 42 22	0.9	2		1910
591 [1906 TP]	23	10.4	18 6.4 18 6.7	-42 22 $-16 18$	1.2	-2	0.175	1906
9	23	10.4	/		1.0	+1	0.177	1910
115 Thyra 648 [1907 <i>AE</i>]	23 24	14.1	18 8.4	-35 4 -28 6	0.8	+3 +1	0.455	1908
	·							1909
521 Brixia	24 24	12.7	18 10.1 18 12.2	-23 56 $-14 4$	0.8	3	0.318	1909
197 Arete	2.1	12.0	18 13.1	-26 12	1.0	5	0.150	1907
471 Papagena	25	10.3	18 13.1	$-26\ 37$	0.9	4	0.150	1910
121 Hermione	26	11.1	18 16.1	$-26 \ 47$	0.8	-2	0.368	1908
TAL HOLIMIONE	20		10 10,1	40 4/	0.0	4	2.500	1900

(46) OPPOSITIONEN DER KL. PLANETEN FÜR 1911.

N 1 N	Tag	a		12h Mittle	re Z	eit		Letzte Beob-
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	δ Δ	$\mathrm{Log}.\Delta$	achtung
61 Danae	Juni 26	10.6	18 ^h 18.3	$-48^{\circ}32^{\circ}$	m 1.2	+ 3	0.254	1909
388 Charybdis	26	11.4	18 19.7	-33 17	0.9	. 0	0.270	1910
494 Virtus	26	11.9	18 20.0	-3233	0.9	2	0.256	1910
146 Lucina	27	10.8	18 24.7	$-27 \ 28$	1.0	— 5	0.200	1910
523 Ada	29	13.7	18 29.2	2ī 45	0.9	o	0.392	1910
20 Massalia	30	9.9	18 32.7	—22 IO	1.1	0	0.240	1910
624 Hektor	30	13.2	18 34.9	-4334	0.7	0	0.641	1909
273 Atropos	Juli 1	10.8	18 37.9	+11 8	0.8	- 7	0.054	1910
170 Maria	2	12.0	18 41.2	31 56	1.2	+ 4	0.232	1904
410 Chloris	2	10.2	18 41.2	-2357	0.9	- 9	0.030	1910
230 Athamantis	2	10.3	18 42.1	-12 2 6	1.0	+ 3	0.141	1907
83 Beatrix	2	11.2	18 45.0	—31 16	I.I	— 2	0.146	1904
175 Andromache .	4	11.4	18 49.3	27 52	0.9	2	0.239	1909
320 Katharina	5	14.0	18 53.5	-10 13	0.9	0	0.283	1907
679 Pax	5	10.4	18 58.4	-1529	1.1	12	0.143	1910
325 Heidelberga .	6	12.9	18 59.1	33 27	1.0	0	0.405	1909
276 Adelheid	6	12.2	18 59.1	- - 6 58	0.7	1	0.380	1907
588 Achilles	7	15.0	19 3.0	-29 16	0.5	0	0.693	1907
235 Carolina	7	11.8	19 4.8	-31 52	1.0	- 4	0.231	1910
651 [1907 AN]	8	13.6	19 7.7	-3715	1.0	- 2	0.316	1909
266 Aline	8	11.7	19 8.6	- 6 1 0	0.9	+ 2	0.254	1909
102 Miriam	9	11.7	19 10.6	13 30	0.9	0	0.102	1902
284 Amalia	10	11.3	19 16.2	7 33	0.8	+ 4	9.920	1910
222 Lucia	11	12.1	19 18.2	-2352	0.8	2	0.231	1910
497 Iva	11	12.6	19 20.8	-30 2 8	1.0	2	0.154	1902
426 Hippo	12	11.6	19 25.4	- 31 29	1.2	+ 4	0.296	1908
655 [1907 BF]	13	12.7	19 27.2	-18 34	0.8	- 3	0.318	1909
338 Budrosa	13	12.I	19 27.9	-21 38	0.9	0	0.281	1909
311 Claudia	13	13.0	19 29.0	- 24 19	0.9	- 3	0.282	1905
94 Aurora	13	11.5	19 29.7	-33 17	0.9	I	0.357	1909
260 Huberta	14	13.3	19 29.7	-13 57	0.8	— 2	0.320	1906
* 13 Egeria	15	10.2	19 35.5	-45 34	1.2	- 4	0.263	1910
567 Eleutheria	15	13.0	19 38.4	-32 18	0.9	- 3	0.314	1910
678 [1909 FS]	16	12.6	19 41.4	- 19 25	1.0	0	0.213	1909
73 Klytia	16	12.2	19 41.7	2 5 8	1.0	— 2	0.235	1905
166 Rhodope	81	12.3	19 48.1	-16 14	0.9	-7	0.206	1909
180 Garumna	18	14.1	19 49.3	-21 32	0.9	- 2	0.334	1899
659 Nestor	19	13.8	19 50.3	-2553	0.6	— I	0.559	1909
* 17 Thetis	19	9.3	19 50.8	-19 19	0.9	_ 6	0.067	1910
157 Dejanira	19	14.7	19 50.9	35 25	0.1	- 4	0.321	1908

OPPOSITIONEN DER KL. PLANETEN FÜR 1911. (47)

W/I=1	Tag			12h Mittle	ere Z	eit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\mathrm{Log}.\Delta$	Beob- achtung
504 Cora 348 May 223 Rosa 91 Aegina 371 Bohemia	Juli 19 19 19 20 21	11.7 13.3 13.8 11.7	19 51.9 19 52.1 19 53.1 19 58.1 19 58.4	-25 15 -27 5 -23 32 -23 58 -17 41	0.9 0.9 0.9 1.0	-10 -4 -3 -2	0.110 0.331 0.381 0.254 0.195	1909 1910 1910 1910
366 Vincentina	22 22 23 23 23	12.0 12.4 12.6 10.9 13.8	20 2.0 20 2.6 20 8.3 20 9.0 20 9.0	-33 20 -18 7 -17 20 -19 17 -19 12	1.0 0.8 0.7 0.9 0.8	0 - 2 - 2 - 2 - 3	0.292 0.350 0.455 0.297 0.402	1909 1910 1909 1908 1909
677 [1909 FR] * 28 Bellona 408 Fama 507 Laodica 496 Gryphia	24 25 26 26 28	12.9 10.8 13.4 12.4 13.4	20 13.3 20 17.2 20 19.4 20 20.8 20 28.2	-13 37 -14 25 -18 50 -17 29 -12 31	0.9 0.8 0.9 0.9	0 - 5 0 0 - 4	0.277 0.339 0.333 0.320 0.110	1909 1910 1906 1909 1902
78 Diana	29 30 31 31 31	11.7 14.0 10.2 14.3 10.4	20 30.0 20 35.2 20 38.0 20 40.9 20 41.7	-25 34 -23 26 -28 29 -11 15 -25 15	1.0 0.9 1.2 0.9 1.2	- 2 - 5 + 3 - 1 + 5	0.334 0.316 0.133 0.296 0.207	1908 1905 1908 1909
374 Burgundia	Aug. 3 5 5 5 6	11.5 11.8 12.9 12.2 11.6	20 49.4 20 57.3 20 58.0 20 59.4 21 3.3	- 2 56 -20 39 -14 34 -27 16 -36 26	0.8 0.9 0.8 0.9	- 4 - 4 - 6 - 6 - 3	0.230 0.137 9.938 0.256 0.086	1910 1891 1909
585 [1906 T.1] 441 Bathilde 610 [1906 VK] 355 Gabriella 417 Suevia	10 10 11 9	13.4 12.8 14.7 13.4 13.2	21 11.8 21 11.8 21 18.2 21 21.1 21 23.3	- 7 42 - 4 40 -36 4 -19 43 - 6 22	0.9 0.8 1.0 1.0 0.8	- 6 - 3 - 2 - 3 - 5	0.239 0.291 0.204 0.226 0.311	1910 1906 1905 1910
529 Preziosa 676 [1909 FN] 618 [1906 VZ] *108 Hecuba 360 Carlova	12 14 15 16	12.9 11.8 12.1 11.7 11.8	21 25.8 21 31.2 21 36.1 21 40.0 21 44.1	-31 37 -11 0 -27 3 -17 25 -16 49	0.9 0.7 0.7 0.9 0.8	- 5 - 9 - 8 - 3 - 7	0.298 0.229 0.306 0.348 0.292	1904 1909 1910 1909 1908
 530 Turandot 423 Diotima 478 Tergeste 214 Aschera 563 Suleika 	17 19 19 20 21	11.4 11.1 11.3 12.3 10.9	21 44.2 21 51.1 21 53.5 21 58.1 22 1.5	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0.7 0.8 0.8 0.9 0.8	- 7 - 5 - 3 - 4 - 7	0.213 0.307 0.353 0.223 0.207	1910 1910 1910 1905 1910

(48) OPPOSITIONEN DER KL. PLANETEN FÜR 1911.

	Tag			12 ^h Mittle	ere Z	eit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\text{Log.}\Delta$	Beob- achtung
349 Dembowska	Aug. 24 24 25 27	9.9 13.1 12.3 11.2	22 10.5 22 11.7 22 13.1 22 22.7 22 23.5	-24 3 -16 5 -36 57 -13 39 - 9 13	0.8 0.7 1.1 0.7 0.8	$ \begin{bmatrix} -2 \\ -7 \\ -2 \\ -6 \\ -5 \end{bmatrix} $	0.240 0.327 0.178 0.371 0.291	1909 1907 1910 1909
386 Siegena 487 Venetia 587 [1906 TF] 609 [1906 IF] 608 [1906 VD]	29 29 29 30 31	9.7 11.6 15.1 12.9 13.5	22 27.7 22 29.1 22 31.6 22 32.6 22 37.6	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	0.7 0.8 1.2 0.7 0.8	-13 - 6 + 1 - 6 - 2	0.182 0.189 0.233 0.311 0.229	1906 1910 1908 1910 1906
362 Havnia 442 Eichsfeldia 205 Martha 89 Julia 413 Edburga	Sept. 1 5 5 6	11.0 12.3 12.5 8.9 9.9	22 37.7 22 39.6 22 55.7 22 57.0 22 58.1	-1959 -1248 $+636$ $+1234$ -4319	0.9 0.9 0.7 0.7 0.4	$ \begin{bmatrix} -3 \\ -8 \\ -7 \\ +6 \\ -12 \end{bmatrix} $	0.193 0.150 0.234 0.046 9.908	1909 1910 1907 1909 1896
649 [1907 AF] 506 Marion 600 [1906 UM]	7 7 8 10	13.0 12.6 13.0 11.9	22 59.6 23 0.7 23 3.7 23 11.6 23 17.9	-14 18 $+ 9 11$ $-13 12$ $-25 53$ $- 5 26$	1.1 0.9 0.8 0.9 0.7	+ 6 - 1 - 9 - 5 - 4	9.921 0.331 0.218 0.293 0.396	1909 1908 1910 1909
594 [1906 TW] 656 [1908 BU] 200 Dynamene 370 Modestia	12 14 15 16 16	15.2 14.2 10.8 12.3 10.1	23 21.8 23 27.3 23 32.9 23 33.4 23 34.9	-16 6 -3 21 $+3$ 4 $+11$ 49 -7 2	0.8 0.7 0.9 0.9	-14 - 5 - 3 - 2 - 7	0.243 0.399 0.172 0.051 0.192	1906 1908 1908 1904 1909
23 Thalia	17 18 18 18	10.0 12.3 11.9 12.7 14.3	23 36.3 23 39.6 23 39.9 23 43.0 23 45.0	$ \begin{array}{rrrr} -18 & 58 \\ -1 & 31 \\ +8 & 27 \\ +0 & 56 \\ -2 & 20 \end{array} $	0.9 0.9 0.8 1.0	- 5 - 1 - 6 - 6 - 5	0.300 0.327 0.166 0.106 0.340	1909 1906 1906 1906
174 Phaedra 483 Seppina 274 Philagoria 304 Olga 611 [1906 VL]	20 22 22 23 25	11.7 12.3 14.1 10.9 13.5	23 49.2 23 54.3 23 57.3 0 0.0 0 4.6	+ 9 16 $- 2 0$ $- 5 59$ $- 11 49$ $+ 3 41$	0.9 0.6 0.7 0.7 0.7	- 3 - 9 - 5 -17 - 9	0.282 0.360 0.371 9.964 0.275	1909 1909 1905 1910 1908
* 53 Kalypso 449 Hamburga 267 Tirza	26 26 27 29	11.4 12.5 13.9 12.5 12.7	4.711.114.818.318.6	$-5 \circ -4 3 -8 13 +11 29 +4 52$	0.8 0.9 0.8 0.9	- 7 - 6 - 4 - 5 - 9	0.189 0.250 0.249 0.165 0.149	1909 1909 1909 1910

OPPOSITIONEN DER KL. PLANETEN FÜR 1911. (49)

V I. V	Tag	C		12 ^h Mittl	ere Z	Zeit		Letzte Beob-
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\text{Log}\Delta$.	achtung
457 Alleghenia 291 Alice ·	Sept. 29	14.0	o 20.3	+22 IO	o.7	- 6'	0.199	1900
644 [1907 AA]	30	12.1	0 24.1	+ ° 54 + ° 35	0.8	$-7 \\ -5$	0.075	1908
364 Isara	30	11.0	0 24.8	-10 10	0.9	6	9.999	1906
430 Hybris	30	12.0	0 25.8	+26 19	0.8	- 7	0.128	1897
176 Idunna	Okt. I	11.0	0 27.4	+11 17	0.6	-14	0.211	1909
352 Gisela	I	II.I	0 27.7	+ 9 39	0.9	- 7	9.947	1908
114 Kassandra	2	11.6	0 29.5	+04	0.8	- 7	0.293	1909
187 Lamberta	2	12.4	0 32.0	- 0 54	0.9	- 3	0.355	1909
139 Juewa	2	11.6	0 32.3	+ 5 32	0.9	— <u>3</u>	0.343	1909
559 Nanon	2,	12.6	0 33.7	—11 17	0.8	— 6	0.263	1910
416 Vaticana	4	11.7	0 35.5	—13 24	1.0	- 2	0.282	1910
188 Menippe	4	12.5	0 36.8	+19 50	0.8	8	0.179	1909
369 Aeria	4	12.2	0 40.7	—19 I	0.9	- 3	0.160	1907
409 Aspasia	7	11.0	0 50.5	+19 13	0.8	— 7	0.238	1909
293 Brasilia	7	13.3	0 50.8	-15 5	0.8	4	0.328	1890
621 [1906 WJ]	8	13.8	0 51.8	+ 2 25	0.8	- 4	0.300	1906
265 Anna	9	15.1	0 55.0	+37 28	1.2	I	0.322	1902
150 Nuwa	IO	10.8	0 59.0	+ 7 3	0.8	6	0.211	1908
22 Kalliope	10	9.5	I 2.6	—I2 3I	0.9	- 2	0.240	1909
607 [1906 FC]	12	13.1	1 7.1	+23 6	0.8	- 6	0.323	1910
133 Cyrene	12	11.8	1 8.0	+1651	0.8	- 4	0.371	1908
308 Polyxo	12	11.0	I 9.0	+ 5 18	0.8	6	0.240	1910
533 Sara	14	13.7	1 17.5	+ 4 50	0.7	- 6	0.329	1910
287 Nephthys	16	10.8	1 22.5	- 6 47	0.9	<u> </u>	0.148	1910
453 Tea	16	12.8	1 23.2	+10 48	I.I	- 4	0.144	1910
432 Pythia	18	11.6	I 27.4	—10 59	1.0	- 3	0.184	1910
* 47 Aglaja	18	10.8	1 28.1	+12 17	0.9	— 3	0.233	1909
534 Nassovia	18	12.5	1 31.8	+ 4 16	0.8	6	0.231	1909
658 [1908 BW]	19	13.4	1 35.9	+11 28	0.8	— 4	0.236	1908
* 90 Antiope	21	11.4	1 40.0	+ 7 51	0.8	- 4	0.301	1908
* 37 Fides	22	9.5	I 45.4	+13 1	0.9	- 3	0.099	1909
613 [1906 <i>VP</i>]	24	12.8	I 51.5	+19 5	0.9	_ 2	0.250	1906
227 Philosophia	26	13.8	2 0.4	+24 18	0.8	— 3	0.448	1908
557 Violetta	26	13.7	2 1.0	+16 47	1.0	- 5	0.156	1909
466 Tisiphone	27	12.1	2 3.5	+39 37	0.9	- 4	0.417	1907
605 [1906 <i>UU</i>]	27	12.4	2 4.2	+40 2	I.I	- I	0.248	1906
385 Ilmatar	27	10.7	2 6.6	+29 48	1.0	— 2	0.322	1910
403 Cyane	28	12.1	2 8.3	+20 28	0.8	- 7	0.263	1910
518 Halawe	28	12.7	2 8.4	+10 47	0.9	- 6	0.097	1903

(50) OPPOSITIONEN DER KL. PLANETEN FÜR 1911.

	Tag	7-1		12 ^h Mittl	ere Z	Leit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$Log.\Delta$	Beob- achtung
218 Bianca	Okt. 29	12.0	2 10.3	- 2°42	o.8	-7	0.290	1910
*241 Germania	30	10.8	2 15.1	+20 49	0.8	-5	0.267	1910
310 Margarita	30	13.5	2 18.1	+14 59	0.8	-5	0.309	1891
661 [1908 CL]	31	12.7	2 18.2	+26 56	0.9	-3	0.309	1908
647 [1907 <i>AD</i>]	31	12.4	2 19.9	+22 56	0.9	-8	0.010	1907
508 Princetonia	Nov. 1	12.3	2 22.2	+11 17	0.9	_ı	0.344	1908
124 Alkeste	I	10.1	2 23.4	+11 55	0.9	-5	0.258	1909
261 Prymno	2	12.1	2 27.4	+94	1.0	4	0.157	1909
14 Irene	3	10.3	2 32.0	+ 3 54	0.9	-3	0.281	1909
156 Xanthippe	5	12.4	2 41.2	20 28	0.9	-4	0.371	1906
119 Althaea	6	10.1	2 44.1	+12 33	0.9	-7	0.147	1909
22T Eos	6	11.1	2 44.4	- o 53	0.8	-4	0.285	1910
206 Hersilia	6	11.8	2 46.5	+ 9 58	1.2	-4	0.222	1910
5 Astraea	7	9.6	2 46.9	+73	1.0	2	0.182	1905
* 26 Proserpina	11	11.0	3 1.5	+17 22	1.0	-3	0.277	1910
303 Josephina	11	11.6	3 5.5	+27 20	0.8	—2	0.283	1909
249 Ilse	II	12.5	3 5.7	+37 12	1.2	-3	9.980	1907
680 [1909 GW]	12	13.8	3 6.4	+21 44	0.9	-I	0.418	1909
2 03 Pompeja	12	11.3	3 7.2	+22 18	1.0	-3	0.200	1909
58 Concordia	12	11.8	3 8.3	+10 18	0.9	-4	0.256	1910
428 Monachia	12	11.7	3 10.0	+25 43	1.1	1	9.964	1897
268 Adorea	13	13.0	3 10.0	+14 19	0.8	-3	0.370	1907
577 [1905 RH]	15	13.3	3 19.5	+26 4	0.9	-3	0.366	1908
652 Jubilatrix	16	12.8	3 23.6	+ 2 7	I.I	+4	0.132	1909
12 Victoria	18	9.9	3 33 1	+17 35	1.0	-7	0.157	1910
305 Gordonia	18	11.5	3 33.6	+16 13	0.8	-5	0.208	1905
532 Herculina	18	10.3	3 35.0	— I 25	0.9	I	0.319	1909
255 Oppavia	20	13.9	3 41.5	+30 20	1.1	I	0.256	1904
554 Peraga	20	9.8	3 42.2	+24 40	1.0	4	0.010	1909
681 [1909 GZ]	21	14.5	3 44.7	+ 4 14	0.8	-4	0.354	1909
142 Polana	21	12.9	3 45 0	+22 43	1.0	-4	0.240	1903
*288 Glauke	22	13.3	3 50.8	+1426	0.9	-2	0.337	1909
326 Tamara	23	12.1	3 52.9	+40 42	1.6	+2	0.244	1907
2 Pallas	24	7.5	3 55.2	-30 29	0.9	-6	0.208	1909
212 Medea	26	11.5	4 4.5	+27 14	0.9	-3	0.247	1907
456 Abnoba	26	13.8	4 6.5	+1558	0.9	6	0.360	1910
67 Asia	27	11.5	4 11.5	+1437	1.0	− 4	0.198	1910
576 Emanuela	27	12.7	4 13.0	+33 42	0.9	-5	0.300	1905
377 Campania	29	II.I	4 20.1	+14 59	0.9	−5 ·	0.180	1906
397 Vienna	Dez. I	11.6	4 25.0	+14 3	1.0	-9	0.095	1910

OPPOSITIONEN DER KL. PLANETEN FÜR 1911. (51)

- N	Tag	-		12h Mittl	ere Z	Zeit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$Log.\Delta$	Beob- achtung
63 Ausonia	Dez. 2	10.6	4 28.5	+31° 3	m I.2	- 2	0.229	1909
548 Kressida	2	11.9	4 29.3	+16 32	1.0	+ 1	9.943	1909
564 Dudu	3	14.7	4 37.6	+21 52	1.0	+ 2	0.366	1905
511 Davida	4	8.4	4 39.1	+ 5 43	0.9	+ 4	0.203	1909
321 Florentina	6	12.9	4 47.5	+24 38	1.0	- I	0.247	1903
253 Mathilde	7	13.3	4 53.0	+12 11	1.0	— I	0.205	1906
629 [1907 XU]	9	13.1	5 1.7	+19 44	0.9	+ 2	0.240	1907
573 [1905 RC]	10	12.9	5 6.9	+37 54	1.1	- 2	0.275	1908
245 Vera	II	11.7	5 11.7	+25 24	1.0	+ 1	0.217	1907
650 [1907 A.N]	12	13.8	5 15.0	+19 42	1.0	- 2	0.052	1907
376 Geometria	13	12.7	5 21.3	+28 51	0.9	— I	0.230	1910
164 Eva	14	10.4	5 22.4	+26 43	1.5	+13	0.076	1905
531 Zerlina	14	15.1	5 25.5	-19 53	0.9	- 3	0.402	1904
195 Eurykleia	15	12.1	5 27.6	+33 42	1.1	0	0.258	1910
583 Klotilde	15	12.6	5 27.9	+22 58	0.9	— 3	0.277	1908
367 Amicitia	16	12.1	5 28. 1	+23 15	1.2	+ 1	0.040	1909
537 Pauly	17	13.9	5 37-3	+15 12	0.8	+ 1	0.412	1909
263 Dresda	17	13.1	5 37.6	+21 55	0.9	- I	0.256	1906
51 Nemausa	19	9.9	5 44.I	+ 6 26	1.0	0	0.144	1909
524 Fidelio	19	11.9	5 48.3	+35 17	1.2	— 2	0.160	1910
401 Ottilia	19	12.9	5 48.6	+29 48	0.9	— І	0.395	1907
167 Urda	19	13.2	5 48.8	+20 13	0.9	0	0.293	1906
646 [1907 AC]	20	14.8	5 50.6	+30 12	1.3	— 3	0.149	1907
298 Baptistina	20	13.2	5 53.8	+34 58	1.3	0	0.060	1907
486 Cremona	2.1	14.0	5 57.0	+21 51	I.I	+ 4	0.200	1902
346 Hermentaria .	22	11.3	6 1.4	+22 53	1.0	+ 3	0.229	1908
368 Haidea	23	14.1	6 4.3	+16 16	0.8	— I	0.387	1893
306 Unitas	23	11.4	6 4.3	- -14 28	1.1	+ 2	0.217	1910
657 [1908 BV]	23	13.6	6 5.1	+31 6	1.1	3	0.200	1908
211 Isolda	25	10.5	6 10.6	+22 39	0.9	- I	0.200	1910
683 [1909 <i>HC</i>]	25	12.3	6 11.6	+17 26	0.9	- 4	0.322	1909
257 Silesia	25	12.2	6 12.0	+28 13	1.0	+ I	0.251	1907
454 Mathesis	26	11.9	6 15.0	+32 0	1.1	+ I	0.241	1908
615 [1906 VR]	26	13.1	6 20.2	+27 33	I.I	+ 1	0.283	1909
480 Hansa	27	11.3	6 22.2	+ 1 38	1.0	— 6	0.204	1906
448 Natalie	27	13.9	6 24.1	+38 13	1.0	+ 2	0.384	1899
445 Edna	28	12.3	6 27.3	+33 24	1.1	- 6	0.302	1905
509 Iolanda	29	11.5	6 28.9	+ 3 43	1.0	2	0.318	1909
165 Loreley	29	11.5	6 29.0	+30 44	1.0	— 2	0.373	1907
498 Tokio	30	11.7	6 34.5	+23 13	1.0	+ 4		1909

(52) OPPOSITIONEN DER KL. PLANETEN FÜR 1911.

	Tag	-		12h Mittl	ere Z	Ceit		Letzte
Nr. und Name	der Opp.	Gr.	AR.	Dekl.	Δα	Δδ	$\mathrm{Log.}\Delta$	Beob- achtung
			6 39.1		10	,		
233 Asterope	Dez. 31	11.5		-13 10	1.0	0	0.249	1910
538 Friederike	31	13.1	6 41.2	+16 33	0.9	+3	0.330	1909
69 Hesperia	31	9.7	6 41.2	+97	I.I	+1	0.183	1905
259 Aletheia	32	12.6	6 41.9	+26 I	0.8	+3	0.387	1905
465 Alekto	32	13.9	6 43.7	+25 54	0.9	0	0.382	1908
406 Erna	33	13.7	6 48.4	+26 44	0.9	0	0.306	1910
140 Siwa	33	12.4	6 49.5	+22 29	1.0	+2	0.360	1909
614 [1906 VQ]	37	13.1	7 6.2	+11 32	0.9	+1	0.186	1906
637 [1907 YE]	39	13.6	7 15.4	+2248	0.9	+2	0.292	1907
545 Messalina	39	13.1	7 16.5	+33 41	0.9	0	0.442	1907
580 [1905 SE]	41	13.4	7 23.9	+23 0	0.9	+3	0.287	1905
581 Tauntonia	46	13.5	7 45.9	+27 31	0.9	+8	0.331	1908
660 [1908 <i>CC</i>]	47	11.1	7 51.0	+ 5 38	0.9	+6	0.252	1909

Von den mit einem Sternchen (*) bezeichneten Planeten enthält das Jahrbuch Seite (53)—(73) ausführliche Ephemeriden. — Nicht berücksichtigt sind die Planeten: 99, 132, 155, 193, 220, 285, 323, 330, 353, 392, 396, 400, 452, 463, 473, 474, 489, 493, 515, 517.

(19) FORTUNA 1911.

		(19) r	UNIUNA I	911.		
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
Jan. 5 6 7	7 49 39.97 7 48 37.13 7 47 33.76	-62.84 63.37	+18°23′18.7 18°25′45.9 18°28′14.5	-J-2 27.2 2 28.6	0.129012 0.128806 0.128688	II II II II
8	7 46 29.92 7 45 25.72	63.84	18 30 44.6 18 33 16.1	2 30.1	0.128658 0.128716	II II II IO
10	7 44 21.24 7 43 16.56	- 64.48 64.68	+18 35 48.9 18 38 22.8	+2 32.8 2 33.9	0.128864 0.129101	11 11
12	7 42 11.76 7 41 6.95	64.80 64.81 64.74	18 40 57.4 18 43 32.6	2 34.6 2 35.2	0.129428	II 12 II 12
& 14 15	7 40 2.21 7 38 57.61	-64.60	18 46 8.2 +18 48 43.9	2 35.6 +-2 35.7	0.130352	11 13
16 17	7 37 53.25 7 36 49.23	64.36 64.02 63.60	18 51 19.4 18 53 54.7	2 35.5 2 35.3	0.131629	11 15
18 19	7 35 45.63 7 34 42.53	63.10 -62.52	18 56 29.5 18 59 3.7	2 34.8	0.133254 0.134196	11 18
20 21	7 33 40.01 7 32 38.16	61.85 61.09	+19 1 37.0 19 4 9.2	+2 33.3 2 32.2 2 31.1	0.135225 0.136339	II 2I II 22
22 23	7 31 37.07 7 30 36.84	60.23 59.29	19 6 40.3 19 9 10.1	2 29.8	0.137536	11 24
24 25	7 29 37.55 7 28 39.28	- 58.27 57.18	19 11 38.4 +19 14 5.1	+2 26.7 2 24.9	0.140175 0.141614	11 28
26 27	7 27 42.10 7 26 46.09	56.01 54-77	19 16 30.0 19 18 53.0	2 23.0	0.143131	11 33 11 36
28 29	7 25 51.32 7 24 57.85	53·47 -52.09	19 21 14.0	2 18.9 1-2 16.7	0.146396	11 39
30	7 24 5.76 7 23 15.10	50.66 49.18	+ 19 25 49.6 19 28 4.0	2 14.4 2 11.9	0.149959	11 44
Febr. 1 2 3	7 22 25.92 7 21 38.28 7 20 52.24	47.64 46.04	19 30 15.9 19 32 25.2 19 34 31.9	2 9.3 2 6.7	0.153798 0.155817 0.157899	11 50 11 54 11 57
4	7 20 7.85	-44·39 42.68	+19 36 35.9	-l-2 4.0 2 1.2	0.160044	12 I
5 6 7	7 19 25.17 7 18 44.23 7 18 5.06	40.94 39.17	19 38 37.1 19 40 35.4 19 42 30.7	1 58.3 1 55.3	0.162249 0.164511 0.166828	12 4 12 8 12 12
8	7 17 27.69	37·37 -35·54	19 44 23.0	1 52.3 -1-1 49.3	0.169198	12 16
9 10	7 16 52.15 7 16 18.46	33.69	+19 46 12.3 19 47 58.5	1 46.2	0.171619 0.174089	12 20

Opp. in AR. Jan. 14

Größe = 9.6

(113) AMALTHEA 1911.

Febr. 1 8 49 38.39 61.09 18 56 17.3 6 46.0 0.114764 10 0.114539 10 0.114407 10 0.114367 10	
Jan. 16 9 4 51.84 -50.23 17 14 58.3 6 27.1 0.127347 11 18 9 3 10.13 55.48 52.67 17 21 25.4 6 27.1 0.127347 11 19 9 2 17.46 53.80 17 27 57.2 6 31.8 0.124525 11 20 9 1 23.66 55.84 17 27 57.2 6 30.0 0.124525 11 21 9 0 28.80 55.84 17 47 56.0 6 30.0 0.124525 11 21 9 0 28.80 58 36.20 55.84 17 47 56.0 6 43.1 0.122024 11 21 9 0 28.80 56.76 57.58 18 19.99 6 50.0 0.118960 10 0.118907 10 0.118907	rZt.
17 9 4 1.61 51.48 17 14 58.3 6 27.1 0.127347 11 19 9 2 17.46 53.80 17 27 57.2 6 36.0 0.124525 11 17 34 33.2 17 47 56.0 6 43.1 0.120899 10 10 10 10 10 10 10	. s
18 9 3 10.13 52.67 17 21 25.4 6 31.8 0.125897 11 19 9 2 17.46 53.80 17 27 57.2 6 31.8 0.124525 11 20 9 1 23.66 53.80 17 34 33.2 +6 39.7 0.124525 11 21 9 0 28.80 55.84 -7.48 47 56.0 6 43.1 0.122024 11 22 8 59 32.96 56.76 57.58 18 17 47 56.0 6 45.8 0.122024 11 0.122024 11 0.122024 11 0.122024 11 0.122024 11 0.122024 11 0.122024 11 0.122024 11 0.122024 11 0.122024 11 0.122024 11 0.122024 12 12 0.11804 10 0.11804 10 0.11804 10 0.11804 10 0.11804 10 0.11804 10 0.117269	8
19 9 2 17,46 53.80 17 27 57.2 6 36.0 0.124525 11 20 9 1 23.66 -54.86 17 34 33.2 +6 39.7 0.123233 11 21 9 0 28.80 55.84 -17 41 12.9 6 43.1 0.120899 10 22 8 59 32.96 56.76 17 47 56.0 6 43.1 0.120899 10 24 8 57 38.62 57.58 17 54 41.8 6 48.1 0.119860 10 25 8 56 40.29 58.33 18 1 29.9 6 50.0 0.118907 10 26 8 55 41.29 59.57 18 8 19.9 +6 51.2 0.117269 10 27 8 54 41.72 60.66 60.46 18 28 55.3 0.117269 10 0.117269 10 0.117269 10 0.115281 10 31 8 <td< td=""><td>6</td></td<>	6
20 9 1 23.66	
21	4
21 9	2
22 8 59 32.90 56.76 17 47 50.0 6 45.8 0.119860 10 24 8 57 38.62 58.33 18 1 29.9 6 50.0 25 8 56 40.29 59.50 18 8 19.9 -46 51.2 26 8 53 41.66 60.46 18 22 3.2 6 52.1 28 8 53 41.66 60.46 18 28 55.5 6 52.1 29 8 52 41.20 60.76 18 42 38.9 -60.97 31 8 50 39.47 61.08 18 42 38.9 -60.97 31 8 50 39.47 61.08 18 49 29.0 16 50.1 31 8 50 39.47 61.08 18 56 17.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 6 46.0 31 8 49 38.39 61.02 19 3 3.3 32 8 47 36.28 60.84 19 16 26.5 33 8 47 36.28 60.84 19 16 26.5 34 8 46 35.44 -60.57 35 8 45 34.87 60.20 19 29 35.0 36 8 44 34.67 59.75 19 36 2.6 6 22.7 37 8 43 34.92 59.11 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19 42 25.3 6 17.3 38 8 42 35.71 58.88 19.99 10 0.115531 10	0
23 8 50 30.20 57.58 17 54 41.8 6 48.1 6 50.0 0.118907 10 10 10 10 10 10 10	58
24 8 57 38.62 57.58 18 1 29.9 6 50.0 0.118907 10 10 25 8 56 40.29 759.00 18 8 19.9 16 51.2 0.117269 10 10 27 28 8 54 41.72 60.66 18 22 3.2 6 52.3 0.116585 10 29 8 52 41.20 60.76 18 42 38.9 6 50.1 29 8 51 40.44 60.97 61.08 18 49 38.39 61.09 2 8 48 37.30 61.02 3 8 47 36.28 60.84 4 8 46 35.44 60.57 60.20 8 44 34.67 59.75 60.20 8 43 34.92 59.21 8 43 34.92 59.21 8 8 42 35.71 58.88 8 42 35.71 58.88 8 42 25.3 6 17.3 6 17.3 6 17.3 6 17.3 6 22.7 6 17.3	57
25	
26	54
27	
27 8 54 41.72 60.66 18 22 3.2 6 52.3 0.110585 10 29 8 52 41.20 60.76 18 35 47.6 6 51.3 0.115491 10 31 8 50 39.47 61.08 48 49 38.39 61.09 2 8 48 37.30 61.02 3 8 47 36.28 60.84 4 8 46 35.44 60.57 60.20 5 8 43 34.92 6 8 44 34.67 7 8 43 34.92 8 8 42 35.71 8 8 42 35.71 8 8 8 42 35.71 8 8 8 42 35.71 8 8 8 42 35.71 8 8 8 8 42 35.71 8 8 8 8 42 35.71 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	53
28 8 53 41.00 60.46 18 28 55.5 6 52.1 0.115992 10 10 10 10 10 10 10 1	-
29 8 52 41.20 60.76 18 35 47.0 6 51.3 0.115491 10 31 8 50 39.47 61.08 18 42 38.9 10 0.114764 10 0.114539 10 0.114539 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114407 10 0.114418 10 0.114407 10 0.114418 10 0.114407 10 0.114418 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114501 10 0.114501 10 0.114501 10 0.114501 10 0.115118 10 0.115118 10 0.115118 10 0.115531 10 0.1155	51
Febr. 1 8 49 38.39 61.09 18 46 50.1 0.114764 10 0.114539 10 0.114407 10 0.114418 10 0.114407 10 0.114418 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114408 10 0.114501 10 0.114501 10 0.114501 10 0.114501 10 0.114501 10 0.114501 10 0.115081 10 0.114501 10 0.115081 10 0.115081 10 0.115081 10 0.114501 10 0.115081 10 0.114501 10 0.115081 10 0.115081 10 0.114501 10 0.115081 10 0.114501 10 0.114501 10 0.114501 10 0.115081 10 0.114501 10 0.114501 10 0.115081 10 0.114501 10 0.115081 10 0.115081 10 0.114501 10 0.115081 10 0.115081 10 0.114501 10 0.115081 10 0.115081 10 0.114501 10 0.115081 10 0.114501 10 0.115081 10 0.1150	50
31 8 50 39.47 61.08 +18 49 29.0 6 48.3 0.114764 10 2 8 49 38.39 61.09 18 56 17.3 6 46.0 0.114539 10 3 8 47 36.28 61.02 19 3 3.3 6 43.2 0.114407 10 3 8 46 35.44 60.84 19 9 46.5 6 40.0 0.114367 10 5 8 45 34.87 60.20 +19 23 2.8 6 32.2 0.114561 10 6 8 44 34.67 59.75 19 29 35.0 6 27.6 0.114795 10 7 8 43 34.92 59.21 19 36 2.6 6 22.7 0.115118 10 8 8 42 35.71 58.58 19 42 25.3 6 17.3 0.115531 10	50
Febr. 1 8 49 38.39 61.09 18 56 17.3 6 46.0 0.114539 10 2 8 48 37.30 61.02 19 3 3.3 6 46.0 0.114407 10 3 8 47 36.28 60.84 19 9 46.5 6 40.0 0.114367 10 4 8 46 35.44 -60.57 19 16 26.5 -6 36.3 0.114418 10 5 8 45 34.87 60.20 19 29 35.0 6 32.2 0.114561 10 6 8 44 34.67 59.75 19 36 2.6 6 27.6 0.114795 10 7 8 43 34.92 59.21 19 36 2.6 6 22.7 0.115118 10 8 8 42 35.71 58.58 19 42 25.3 6 17.3 0.115531 10	40
2 8 48 37.30 61.09 19 3 3.3 6 43.2 0.114407 10 3 4 4 5 4 5 4 5 4 6 5 6 6 6 6 6 6 6 6 6 6	.,
3 8 47 36.28 60.84 19 9 46.5 6 40.0 0.114367 10 4 8 46 35.44 -60.57 19 16 26.5 16 36.3 0.114361 10 5 8 45 34.87 60.20 +19 23 2.8 6 32.2 0.114561 10 6 8 44 34.67 59.75 19 29 35.0 6 27.6 0.114795 10 7 8 43 34.92 59.21 19 36 2.6 6 22.7 0.115118 10 8 8 42 35.71 58.58 19 42 25.3 6 17.3 0.115531 10	
4 8 46 35.44 60.57 19 16 26.5 636.3 0.114418 10 5 8 45 34.87 60.20 19 23 2.8 632.2 0.114561 10 6 8 44 34.67 59.75 19 29 35.0 62.6 27.6 0.114795 10 7 8 43 34.92 59.21 19 36 2.6 622.7 0.115118 10 8 8 42 35.71 58.58 19 42 25.3 617.3 0.115531 10	17
5 8 45 34.87 60.20 60.20 60.114561 10 60.114795 10 60.115118 10 60.11518 10 60.115118 10 60.115118 10 60.115118 10 60.115118 10 60.11518 10 60.11518 10 60.11518 10 60.11518 10 60.11518 10 60.11518 10	
5 8 45 34.87 60.20 +19 23 2.8 6 32.2 0.114561 10 60.20 7 8 43 34.92 59.75 19 36 2.6 6 22.7 6 17.3 0.115531 10 10 10 10 10 10 10 10 10 10 10 10 10	49
6 8 44 34.67 59.75 19 29 35.0 6 27.6 0.114795 10 8 43 34.92 59.21 19 36 2.6 6 22.7 6 17.3 0.115531 10	49
7 8 43 34.92 59.21 19 36 2.6 6 22.7 0.115118 10 8 42 35.71 58.58 19 42 25.3 6 17.2 0.115531 10	49
8 8 42 35.71 58.58 19 42 25.3 6 17.2 0.115531 10	50
	50
0 1 0 /1 2/.12 1 10 /0 /2.0 1 0 10022 1 10	51
-57.86 +6 11.6	-
57.07 57.07 6 5.6	
56 10	53
12 8 38 46.01 30.118049 10	54
13 8 37 50.77 54.21 20 12 51.4 5 45.6 0.118890 10	55
14 8 36 56.56 34.21 20 18 37.0 5 45.0 0.119813 10	57
$15 \mid 8 \mid 36 \mid 2.45 \mid 1 \mid +20 \mid 24 \mid 15 \mid 2 \mid 1 \mid 0.120816 \mid 10$	58
16 8 25 11.52 34.93 20 20 46 2 3 34.9 0 121808 11	0
17 8 24 20.82 30.00 20 25 04 3 23.2 0 122057 11	2
18 8 33 31.47 49.30 20 40 24.7 5 15.3 0.124202 11	4
19 8 32 43.48 47.99 20 45 31.9 5 7.2 0.125601 11	6
46 53	
20 8 31 56.95 +20 50 30.8 0.126982 11	8
21 8 31 11.93 20 55 21.2 4 30.4 0.128434 11	10

Opp. in AR. Jan. 30 Größe = 10.8

(68) LETO 1911.

		(68)) LETO 191	Ι.		
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
	10 16 56.38 10 16 5.41 10 15 13.87 10 14 21.81 10 13 29.27 10 12 36.30 10 11 42.96 10 10 49.29 10 9 55.35 10 9 1.19 10 8 6.88 10 7 12.46 10 6 17.98 10 5 23.50 10 4 29.06 10 3 34.72 10 2 40.54 10 1 46.58 10 0 52.88 9 59 59.51 9 59 6.52	50.97 51.54 52.06 52.54 52.97 53.34 53.67 53.94 54.16 -54.31 54.42 54.48 54.48 54.48 54.48 54.18 53.96 53.70 53.37 -52.99 52.56	+22° 41′ 18.4 22° 46° 23.2 22° 51° 24.2 22° 56° 21.2 23° 1 13.9 +23° 6 1.9 23° 10° 45.0 23° 15° 22.9 23° 19° 55.3 23° 24° 21.8 +23° 28° 42.2 23° 32° 56.2 23° 37° 3.5 23° 41° 3.8 23° 44° 56.9 +23° 48° 42.6 23° 52° 20.7 23° 55° 51.0 23° 59° 13.3 24° 2° 27.3 +24° 5° 33.0	Diff.	0.359149 0.358765 0.358437 0.358165 0.357951 0.357794 0.357694 0.357666 0.357739 0.357869 0.358057 0.358803 0.358803 0.359378 0.359378 0.359378 0.360377 0.360960 0.361599 0.362293	19 ° ° 18 59 18 58 18 57 18 56 18 56 18 56 18 56 18 56 18 57 18 58 18 59 19 ° ° 19 1 19 3 19 4 19 6 19 8
27 28 März 1	9 58 13.96 9 57 21.90 9 56 30.40	52.06 51.50	24 8 30.2 24 II 18.7 24 I3 58.5	2 48.5 2 39.8	0.363041 0.363840 0.364692	19 10 19 12 19 14
3	9 55 39·49 9 54 49·21	50.91 -50.28 49.59	24 16 29.4 +24 18 51.4	2 30.9 +2 22.0 2 12.9	0.365595 0.366549	19 17 19 19
4 5 6 7	9 53 59.62 9 53 10.76 9 52 22.66 9 51 35.39	48.86 48.10 47.27	24 21 4.3 24 23 8.1 24 25 2.7 24 26 48.0	2 3.8 1 54.6 1 45.3	0.367552 0.368604 0.369705 0.370852	19 22 19 25 19 28 19 31
8 9 10 11	9 50 48.98 9 50 3.48 9 49 18.93 9 48 35.34 9 47 52.74	45.50 44.55 43.59 42.60	+24 28 24.1 24 29 51.0 24 31 8.7 24 32 17.1 24 33 16.4	1 26.9 1 17.7 1 8.4 0 59.3	0.372°44 0.37328° 0.37456° 0.375882 0.377246	19 34 19 37 19 41 19 45 19 48
13 14	9 47 11.18 9 46 30.73	40.45	+24 34 6.6 24 34 47.6	0 41.0	0.378650 0.380092	19 52 19 56

Opp. in AR. Febr. 18

Größe = 11.4

(84) KLIO 1911.

		(04)	KINO 1911	•		
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr Zt.
Febr. 26	11 0 9.61	- 59.99	+2°23′27.0	-1-3 19.4	0.287409 0.286919	16" 6"
27 28	10 59 9.62	60.28	2, 26 46.4	3 23.1	0.286496	16 5
März 1	10 58 9.34	60.52	2 30 9.5	3 26.4	0.286142	16 4
2		60.70	2 33 35.9	3 29.4	0.285856	16 4
	10 56 8.12	-60.82	2 37 5.3	-1-3 31.8		16 3
d ² 3	10 55 7.30	60.88	+2 40 37.1	3 34.2	0.285639	16 2
4	10 54 6.42	60.86	2 44 11.3	3 36.1	0.285491	16 2
5	10 53 5.56	60.78	2 47 47.4	3 37.8	0.285413	16 2
6	10 52 4.78	60.66	2 51 25.2	3 39.1	0.285405	16 2
7	10 51 4.12		2 55 4.3		0.285465	16 2
8	10 50 3.65	-60.47	+ 2 58 44.4	+3 40.1	0.285592	16 2
9	10 49 3.44	60.21	3 2 25.1	3 40.7	0.285784	16 3
10	10 48 3.55	59.89	3 6 6.1	3 41.0	0.286042	16 3
II	10 47 4.02	59-53	3 9 47.1	3 41.0	0.286369	16 4
12	10 46 4.91	59.11	3 13 28.0	3 40.9	0.286763	16 5
		-58.62		1-3 40.3		
13	10 45 6.29	58.08	1-3 17 8.3	3 39-5	0.287223	16 6
14	10 44 8.21	57.50	3 20 47.8	3 38.5	0.287749	16 7
15	10 43 10.71	56.85	3 24 26.3	3 37.2	0.288339	16 8
16	10 42 13.86	56.15	3 28 3.5	3 35.5	0.288994	16 10
17	10 41 17.71	- 55.41	3 31 39.0	-1 3 33.5	0.289712	16 11
18	10 40 22.30		+3 35 12.5		0.290492	16 13
19	10 39 27.68	54.62	3 38 43.9	3 31.4	0.291334	16 15
20	10 38 33.90	53.78	3 42 12.8	3 28.9	0.292236	16 17
2.1	10 37 41.00	52.90	3 45 39.0	3 26.2	0.293196	16 19
22	10 36 49.05	51.95	3 49 2 1	3 23.1	0.294215	16 21
20		-50.98		+3 20.0		
23	10 35 58.07	49-95	+3 52 22.1	3 16.6	0.295291	16 24
24	0.2	48.88	3 55 38.7	3 12.9	0.296424	16 26
25	10 34 19.24	47.76	3 58 51.6	3 9.0	0.297612	16 29
26	10 33 31.48	46.62	4 2 0.6	3 4.9	0.298855	16 32
2.7	10 32 44.86	-45-45	4 5 5.5	+3 0.6	0.300149	16 35
28	10 31 59.41	44.23	+4 8 6.1	2 56.0	0.301493	16 38
29	10 31 15.18		4 11 2.1		0.302888	16 41
30	10 30 32.19	42.99	4 13 53.3	2 51.2	0.304331	16 45
31	10 29 50.48	41.71	4 16 39.5	2 46.2	0.305821	16 48
April 1	10 29 10.08	40.40	4 19 20.5	2 41.0	0.307356	16 52
2	10 28 31.03	-39.05		1-2 35.6		1
. 3	10 27 53.36	37.67	1-1-4 21 56.1	2 30.2	0.308935	16 55
. 3	10 2/ 53.30		4 24 26.3		0.310556	16 59

Opp. in AR. März 3

Größe = 12.6

(152) HILDA TOT

		(153)) HILDA 19	II.		
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
März 18	12 33 54.03		-10 59 50.3	, ,	0.469051	24 28 s
19	12 33 19.83	-34.20	10 55 42.6	+4 7.7	0.468252	24 26
20	12 32 45.28	34.55	10 51 29.6	4 13.0	0.467495	24 23
21	12 32 45.20	34.88	10 47 11.5	4 18.1	0.466780	24 20
22	12 31 35.23	35.17	10 42 48.5	4 23.0	0.466107	24 18
		-35-43		+4 27.7		24 10
23	12 30 59.80	35.66	-10 38 20.8	4 32.2	0.465477	24 16
24	12 30 24.14	35.87	10 33 48.6	4 36.6	0.464890	24 14
25	12 29 48.27	36.03	10 29 12.0	4 40.8	0.464348	24 12
26	12 29 12.24	36.15	10 24 31.2	4 44-7	0.463849	24 11
27	12 28 36.09		10 19 46.5		0.463395	24 9
d 28	12 27 59.85	-36.24	-10 14 58.1	-1-4 48.4	0.462984	24 8
29	12 27 23.56	36.29	10 10 6.2	4 51.9	0.462618	24 6
30	12 26 47.25	36.31	10 5 11.1	4 55.1	0.462296	1 .
31	12 26 10.95	36.30		4 58.1	0.462020	, ,
April	12 25 34.69	36.26		5 0.9	0.461790	1 '
A Pili		36.18	9 55 12.1	+5 3.4		24 4
2	12 24 58.51	36.06	- 9 50 8.7	5 5.6	0.461604	24 4
3	12 24 22.45	35.92	9 45 3.1	5 7.6	0.461464	24 3
4	12 23 46.53	35.74	9 39 55.5	5 9.4	0.461369	24 3
5	12 23 10.79		9 34 46.1	5 10.9	0.461319	24 2
6	12 22 35.27	35-52	9 29 35.2		0.461314	24 2
7	12 22 0.00	- 35-27		- - -5 12.1	0.461353	24 2
8	12 21 25.01	34.99	9 24 23.I 9 19 10.0	5 13.1	0.461437	
		34.68		5 13.8		24 3
9	12 20 50.33	34-34	9 13 56.2	5 14.3	0.461564	24 3
10	12 20 15.99	33.98	9 8 41.9	5 14.5	0.461735	24 4
11	12 19 42.01	-33.59	9 3 27.4	+5 14.6	0.461949	2 4 4
12	12 19 8.42	33.16	- 8 58 12.8		0.462206	24 5
13	12 18 35.26	32.70	8 52 58.3	5 14.5 5 14.0	0.462506	24 6
14	12 18 2.56	32.22	8 47 44.3		0.462848	2 4 7
15	12 17 30.34	31.72	8 42 30.9	5 13.4	0.463232	24 8
16	12 16 58.62		8 37 18.3	5 12.6	0.463657	24 10
177	12 16 27.43	-31.19	- 8 32 6.8	- - -5 11.5		
17		30.62		5 10.1	0.464123	24 11
18	12 15 56.81	30.04	3 1	5 8.5	0.464630	24 13
19	12 15 26.77	29.44		5 6.7	0.465177	24 15
20	12 14 57.33	28.80	. ,	5 4.7	0.465764	24 17
21	12 14 28.53	-28.14	8 11 36.8	+5 2.5	0.466390	24 19
22	12 14 0.39	27.48	- 8 6 34.3		0.467055	24 21
23	12 13 32.91	2/.40	8 I 34.I	5 0.2	0.467757	24 24
-5			, , , ,			"" ""

Opp. in AR. März 28 Größe = 12.6

Anna Santa Pi

(79) EURYNOME 1911.

a		(79) E	URYNOME	1911.		1
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
März 22	12 40 47.99		$-6^{\circ}51^{'}7^{''}3$		0.253744	14 54 s
23	12 39 56.10	-51.89	6 44 19.5	16 47.8	0.253387	14 54
24	12 39 3.89	52.21	6 37 27.3	6 52.2	0.253099	14 53
25	12 38 11.41	52.48	6 30 31.1	6 56.2	0.252882	14 52
2 6	12 37 18.71	52.70	6 23 31.4	6 59.7	0.252735	14 52
		-52.86		- -7 2.7		
27	12 36 25.85	52.96	-6 16 28.7	7 5.3	0.252659	14 52
28	12 35 32.89	53.02	6 9 23.4	7 7.3	0.252656	14 52
29	12 34 39.87	53.00	6 2 16.1	7 9.1	0.252727	14 52
8 30	12 33 46.87	52.93	5 55 7.0	7 10.4	0.252872	14 52
31	12 32 53.94		5 47 56.6		0.253088	14 53
April 1	12 32 1.13	-52.81		+7 11.1	0.253375	14 53
2	12 31 8.51	52.62	-5 40 45.5	7 11.5		
		52.39	5 33 34.0	7 11.5	0.253731	14 54
3	12 30 16.12	52.08	5 26 22.5	7 11.0	0.254156	14 55
4	12 29 24.04	51.73	5 19 11.5	7 10.1	0.254649	14 56
5	12 28 32.31	-51.30	5 12 1.4	+7 8.6	0.255209	14 57
6	12 27 41.01		-5 4 52.8	1	0.255834	14 59
7	12 26 50 17	50.84	4 57 46.0	'	0.256525	15 0
8	12 25 59.85	50.32	4 50 41.4	7 4.6	0.257283	15 2
9	12 25 10.11	49.74	4 43 39.5	7 1.9	0.258109	15 3
10	12 24 21.02	49.09	4 36 40.9	6 58.6	0.259004	15 5
		-48.40		+6 55.1		
11	12 23 32.62	47.68	-4 29 45.8	6 51.3	0.259967	15 7
12	12 22 44.94	46.92	4 22 54.5	6 47.1	0.260994	15 9
13	12 21 58.02	46.10	4 16 7.4	6 42.5	0.262084	15 11
14	12 21 11.92	45.24	4 9 24.9	6 37.6	0.263235	15 14
15	12 20 26.68		4 2 47.3		0.264446	15 16
16	12 19 42.34	44-34	-3 56 14.9	+6 32.4	0.265716	15 19
17	12 18 58.94	43.40	3 49 48.0	6 26.9	0.267044	15 22
18	12 18 16.51	42.43		6 21.0	0.268428	15 25
		41.42	3 43 27.0	6 15.0	0.269868	1 -
19	12 17 35.09	40.37	3 37 12.0	6 8.5		15 28
20	12 16 54.72	-39.28	3 31 3.5	-16 1.8	0.271363	15 31
21	12 16 15.44	38.17	-3 25 1.7	6	0.272912	15 34
22	12 15 37.27		3 19 7.1	5 54.6	0.274512	15 38
23	12 15 0.24	37.03	3 13 19.7	5 47-4	0.276163	15 42
24	12 14 24.39	35.85	3 7 39.7	5 40.0	0.277863	15 45
25	12 13 49.76	34.63	3 2 7.3	5 32.4	0.279610	15 49
		-33-40		1 5 24.8		
26	12 13 16.36	32.16	-2 56 42.5	5 17.0	0.281404	15 53
27	12 12 44.20		2 51 25.5		0.283241	15 57

Opp. in AR. März 30 Größe = 11.3

(122) GERDA 1911.

1	(122) GERDA 1911.					
I 2 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
April 15	14 21 25.76	8	-12° 39 59.7	, w	0.315037	17 10
16	14 20 43.63	-42.13	12 35 55.4	1.4 4.3	0.314429	17 8
17	14 20 1.04	42.59	12 31 48.8	4 6.6	0.313880	17 7
18	14 19 18.02	43.02		4 8.6	0.313389	17 6
19	14 19 10.02	43.41		4 10.5	0.313309	1
19		-43.73	12 23 29.7	+4 12.0		17 5
20	14 17 50.88	44.01	-12 19 17.7	4 13.3	0.312582	17 4
21	14 17 6.87	44.24	12 15 4.4	4 14.4	0.312267	17 3
22	14 16 22.63		12 10 50.0		0.312012	17 3
23	14 15 38.22	44.41	12 6 34.8	4 15.2	0.311817	17 2
24	14 14 53.67	44-55	12 2 19.2	4 15.6	0.311682	17 2
		-44.63		+4 15.9		1
25	14 14 9.04	44.66	-11 58 3.3	4 15.9	0.311607	17 2
₽ 26	14 13 24.38	44.65	11 53 47.4	4 15.6	0.311593	17 2
27	14 12 39.73	44.58	11 49 31.8	4 15.0	0.311639	17 2
28 .	14 11 55.15	44-44	11 45 16.8	4 14.2	0.311745	17 2
29	14 11 10.71		11 41 2.6		0.311912	17 2
30	14 10 26.45	-44.26	-11 36 49.5	+4 13.1	0.312139	17 3
Mai ⊃°	14 9 42.41	44.04	11 32 37.8	4 11.7	0.312426	
2	0 0 0	43.78	11 28 27.8	4 10.0		17 3
		43.46	_	4 8.0	0.312772	17 4
3	14 8 15.17	43.09	11 24 19.8	4 5.7	0.313177	17 5
4	14 7 32.08	-42.68	11 20 14.1	1-4 3-3	0.313641	17 6
5	14 6 49.40		-11 16 10.8		0.314163	17 8
6	14 6 7.17	42.23	11 12 10.3	4 0.5	C.314742	17 9
7	14 5 25.45	41.72	11 8 12.8	3 57.5	0.315377	17 10
8	14 4 44.30	41.15	11 4 18.6	3 54.2	0.316068	17 12
9	14 4 3.75	40.55	11 0 27.8	3 50.8	0.316814	17 14
9		-39.93		1-3 47.0		
10	14 3 23.82	39.28	-10 56 40.8	3 43.1	0.317614	17 16
11	14 2 44.54	38.58	10 52 57.7	3 38.9	0.318468	17 18
12	14 2 5.96	37.85	10 49 18.8		0.319374	17 20
13	14 1 28.11	37.09	10 45 44.4	3 34-4	0.320332	17 22
14	14 0 51.02		10 42 14.6	3 29.8	0.321342	17 25
·		-36.29		-l-3 25.1		
15	14 0 14.73	35-45	-10 38 49.5	3 20.3	0.322402	17 27
16	13 59 39.28	34-59	10 35 29.2	3 15.2	0.323511	17 30
17	13 59 4.69	33.71	10 32 14.0	3 9.8	0.324668	17 33
18	13 58 30.98	32.79	10 29 4.2	3 4.3	0.325873	17 36
19	13 57 58.19	-31.83	10 25 59.9	1-2 58.7	0.327125	17 39
20	13 57 26.36		-10 23 1.2		0.328422	17 42
21	13 56 55.51	30.85	10 20 8.2	2 53.0	0.329763	17 45
41	1 2 3 30.31		1 20 0.2		1 5.349/03	1 1/ 45

Opp. in AR. April 26 Größe = 11.2

(118) PEITHO 1911.

Juni 6 18 ^h 2 ^m 8.95 -61.24 -30 43 37.9 -2 46.4 0.266516 19 18 1 7.71 62.11 30 46 24.3 2 41.4 0.265640 19 18 1 8 0 5.60 62.92 30 49 5.7 2 26.2 0.264827 19	5 17 5 16 5 14
7 18 1 7.71 62.11 30 46 24.3 2 41.4 0.265640 11 8 18 0 5.60 62.92 30 49 5.7 2 26.2 0.264827 11	5 19 5 17 5 16 5 14
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5 17 5 16 5 14
8 18 0 5.00 62.92 30 49 5.7 2.26.2 0.204827 19	; 16 ; 14
20 04174	14
9 17 59 2.88 62.66 30 51 41.9 2 30.0 0.20407/ 13	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
11 17 56 54.67 64.97 -30 56 38.3 2 20.0 0.262764 11	; 13
12 17 55 49.70 65.53 30 58 58.3 2 14.3 0.262203 11	12
13 17 54 44.17 66.01 31 1 12.6 2 8.5 0.261707 11	5 11
T4 17 52 28.10 21 2 21 1 1 0 201270 14	5 10
15 17 52 31.73 30.43 31 5 23.6 2 2.3 0.260010 11	5 9
-66.78 -I 56.3	
07.00	· _
17 17 50 17.89 67.27 31 9 9.9 1 43.6 0.260377 11	
18 17 49 10.62 67.42 31 10 53.5 1 37.3 0.260210 11	-
8 19 17 48 3.20 67.47 31 12 30.8 1 31.0 0.260109 11	
20 17 40 55.73 -67.46 31 14 1.8 -1 24.6 0.200074 1	5 7
21 17 45 48.27 67.37 -31 15 26.4 1 18.2 0.260106 11	5 7
22 17 44 40.90 67.2c 31 16 44.6 11.8 0.260206 11	
23 17 43 33.70 66.96 31 17 56.4 1 5.5 0.260372 11	
24 17 42 20.74 21 10 1.0 0.200004 10	5 8
25 17 41 20.11 66.63 31 20 1.1 0.260903 11	5 9
26 17 40 13.88 65.56 -31 20 54.1 0.46.8 0.261268 19	5 10
27 17 39 8.12 65.22 31 21 40.9 0 40.5 0.261698 II	5 11
28 17 28 2.00 21 22 21.4 0.202102 1	5 12
20 17 26 EX 20 21 22 EEX 0 2027E2 1	5 13
30 17 35 54.37 31 23 24.2 0.263375 1	
Juli I 17 34 51.21 -63.16 -31 23 46.6 0.264060 I	5 16
2 17 33 48.88 61.45 31 24 3.1 0.10.6 0.264806 I	5 17
2 17 22 47 42 01.45 21 24 12 7 0265612 1	5 19
4 17 21 46.02 21 24 18.6 0.266470 1	5 21
5 17 30 47.42 39.30 31 24 18.0 0.267403 1	
6 17 20 48.07 -56.45 -21 21 11.0 0.268386 1	5 25
7 17 28 51 62 57.34 21 21 06 011.3 0 260425 1	
8 17 27 55 45 30.10 21 22 44 2 10.3 0 2705 10 1	5 2 9
0 17 27 0.40 34.90 21 22 22.3 0.271667 1	5 32
35:/1	5 34
-52.40 +0 29.5	
11 17 25 14.38 $_{51.04}$ -31 22 28.5 $_{\circ 33.1}$ 0.274123 1	
12 17 24 23.34 31 21 55.4 0.275427 1	5 40

Opp. in AR. Juni 19 Größe = 11.7

(13) EGERIA 1911.

(13) LGERIA 1911.						
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
Mittl. Zeit Juni 27 28 29 30 Juli 1 2 3 4 5 6 7 8 9 10 11 12 13 14 6 15 16 17 18 19 20 21 22 23	19 56 1.90 19 55 2.23 19 54 1.14 19 52 58.71 19 51 55.00 19 50 50.09 19 49 44.04 19 48 36.93 19 47 28.83 19 46 19.82 19 45 9.99 19 43 59.40 19 42 48.15 19 41 36.32 19 40 23.99 19 39 11.25 19 37 58.19 19 36 44.90 19 35 31.47 19 34 17.99 19 33 4.54 19 31 51.22 19 30 38.13 19 29 25.35 19 28 12.99 19 27 1.13 19 25 49.87	- 59.67 61.c9 62.43 63.71 - 64.91 66.05 67.11 68.10 69.01 - 69.83 70.59 71.25 71.83 72.33 72.74 73.06 73.29 73.43 73.48 73.48 73.45 73.32 72.36 71.86 71.26 70.58	-43 51 48.3 43 59 13.5 44 6 28.7 44 13 33.4 44 20 27.1 -44 27 9.5 44 33 40.0 44 39 58.3 44 46 4.0 44 51 56.7 -44 57 36.0 45 3 1.5 45 8 13.0 45 13 10.1 45 17 52.5 -45 22 20.0 45 26 32.3 45 30 29.3 45 34 10.8 45 37 36.6 -45 40 46.6 45 43 40.7 45 46 18.9 45 48 41.1 45 50 47.4 -45 52 37.7 45 54 12.0	7 25.2 7 15.2 7 4.7 6 53.7 6 42.4 6 30.5 6 18.3 6 5.7 5 52.7 -5 39.3 5 25.5 5 11.5 4 57.1 4 42.4 -4 27.5 4 12.3 3 57.0 3 41.5 3 25.8 -3 10.0 2 54.1 2 38.2 2 22.2 2 6.3 -1 50.3 1 34.3 1 18.5	0.267470 0.266749 0.266085 0.265478 0.264929 0.264437 0.264004 0.263629 0.263313 0.263057 0.262860 0.262723 0.262645 0.262671 0.262774 0.262936 0.263157 0.263438 0.263777 0.264176 0.264634 0.265151 0.265725 0.266357 0.267045 0.267790	15 23 15 21 15 20 15 19 15 17 15 16 15 15 15 15 15 14 15 14 15 13 15 14 15 15 15 br>15 15 15 15 15 15 15 15 15 15 15 15 15 15 1
24 25 26 27	19 25 49.67 19 24 39.29 19 23 29.50 19 22 20.58 19 21 12.63	69.79 68.92 -67.95	45 55 30.5 45 56 33.1 45 57 19.8 —45 57 50.8	1 2.6 0 46.7 -0 31.0	0.268590 0.269445 0.270354 0.271317	15 24 15 25 15 27 15 29 15 31
28 29	19 20 5.73 19 18 59.97	66.90 65.7 6	45 58 6.4 45 58 6.6	0 15.6	0.272333	15 33 15 36

Opp. in AR. Juli 15 Größe = 10.2

Samter.

(17) THETIS 1911.

(17) THE 11S 1911.						
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
Juli 8	20 0 34.78		18° 13 ' 59.4		0.068847	m
		−50.6o	10 13 59.4	-5 43.8	0.068238	9 44
9	19 59 44.18	51.37	18 19 43.2	5 47-4	0.008238	9 44
10	19 58 52.81	52.08	18 25 30.6	5 50.6		9 43
11	19 58 0.73	52.70	18 31 21.2	5 53-4	0.067278	9 42
12	19 57 8.03	-53.26	18 37 14.6	5 55.9	0.066929	9 42
13	19 56 14.77	53.76	-18 43 10.5	5 57.9	0.066667	9 41
14	19 55 21.01		18 49 8.4		0.066494	9 41
15	19 54 26.83	54.18	18 55 7.8	5 59-4 6 o.6	0.066410	9 41
16	19 53 32.32	54.51	19 1 8.4		0.066416	9 41
17	19 52 37.57	54.75	19 7 9.9		0.066513	9 41
18	19 51 42.66	-54.91		-6 2.0	0.066701	0.17
		55.00	-19 13 11.9	6 2.0	0.066980	9 41
£ 19	19 50 47.66	54.98	19 19 13.9	6 1.7		9 42
20	19 49 52.68	54.87	19 25 15.6	6 1.1	0.067351	9 42
21	19 48 57.81	54.67	19 31 16.7	6 0.2	0.067813	9 43
22	19 48 3.14	-54.38	19 37 16.9	-5 58.9	0.068365	9 43
23	19 47 8.76		-19 43 15.8		0.069008	9 44
24	19 46 14.77	53.99	19 49 13.0	5 57-2	0.069741	9 45
25	19 45 21.25	53.52	19 55 8.2	5 55.2	0.070561	9 47
26	19 44 28.28	52.97	20 I I.0	5 52.8	0.071470	9 48
27	19 43 35.96	52.32	20 6 51.1	5 50.1	0.072467	9 50
28		-51.59		-5 47.1		
	19 42 44.37	50.79	-20 12 38.2	5 43.9	0.073549	9 51
29	19 41 53.58	49.90	20 18 22.1	5 40.3	0.074716	9 52
30	19 41 3.68	48.92	20 24 2.4	5 36.5	0.075967	9 54
31	19 40 14.76	47.86	20 29 38.9	5 32.4	0.077301	9 56
Aug. 1	19 39 26.90	- 46.75	20 35 11.3	- 5 28.0	0.078715	9 58
2	19 38 40.15		20 40 39.3		0.080207	10 0
3	19 37 54.59	45.56	20 46 2.7	5 23.4	0.081776	IO 2
4	19 37 10.29	44.30	20 51 21.2	5 18.5	0.083420	10 4
5	19 36 27.30	42.99	20 56 34.6	5 13.4	0.085137	10 6
6	19 35 45.68	41.62	21 1 42.8	5 8.2	0.086925	10 9
		-40.21		5 2.9		
7	19 35 5.47	38.74	-21 6 45.7	4 57-4	0.088784	10 12
8	19 34 26.73	37.24	21 11 43.1	4 51.7	0.090712	10 14
9	19 33 49.49	35.70	21 16 34.8	4 45.9	0.092708	10 17
10	19 33 13.79	34.11	21 21 20.7	4 40.1	0.094768	10 20
11	19 32 39.68	-32.48	21 26 0.8	-4 34.1	0.096890	10 23
12	19 32 7.20		-21 30 34.9		0.099074	10 26
13	19 31 36.38	30.82	21 35 2.9	4 28.0	0.101316	10 29
3			1			1

Opp. in AR. Juli 19

Größe = 9.3

(76) FREIA 1911.

		(76)	FREIA 191	II.		
12 ^b Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
Juli 16	20 13 23.35	8	17 4 48.6		0.455006	23"48"
		-42.60		-2 8.o	0.457096	
17	20 12 40.75	42.86	17 6 56.6	2 9.3	0.456664	23 46
18	20 11 57.89	43.10	17 9 5.9	2 10.4	0.456275	23 45
19	20 11 14.79	43.28	17 11 16.3	2 11.5	0.455931	23 44
20	20 10 31.51	-43-44	17 13 27.8	-2 12.4	0.455631	23 43
21	20 9 48.07		—17 15 40.2		0.455375	23 43
22	20 9 4.49	43.58	17 17 53.3	2 13.1	0.455165	23 42
£ 23	20 8 20.81	43.68	17 20 7.0	2 13.7	0.454999	23 42
2.1	20 7 37.08	43.73	17 22 21.2	2 14.2	0.454878	23 41
25	20 6 53.34	43.74	17 24 35.8	2 14.6	0.454801	23 41
		-43.72		-2 14.8		
2 ()	20 6 9.62	43.65	—17 2 6 50.6	2 15.0	0.454769	23 41
27	20 5 25.97	43.55	17 29 5.6	2 15.0	0.454782	23 41
28	20 4 42.42	43.40	17 31 20.6	2 14.9	0.454840	23 41
29	20 3 59.02	43.22	17 33 35.5	2 14.7	0.454942	23 41
30	20 3 15.80		17 35 50.2		0.455090	23 42
31	20 2 32.81	42.99	-17 3 8 4.7	2 14.5	0.455282	20.40
Aug. 1	20 1 50.08	42.73		2 14.1		23 42
**		42.46	17 40 18.8	2 13.6	0.455519	23 43
2	20 I 7.62	42.14	17 42 32.4	2 13.1	0.455799	2 3 44
3	20 0 25.48	41.78	17 44 45.5	2 12.4	0.456123	23 45
4	19 59 43.70	- 41-39	17 46 57.9	2 11.6	0.456489	23 46
5	19 59 2.31		17 49 9.5		0.456898	23 47
6	19 58 21.35	40.96	17 51 20.2	2 10.7	0.457350	23 49
7	19 57 40.84	40.51	17 53 29.9	2 9.7	0.457843	23 51
8	19 57 0.81	40.03	17 55 38.6	2 8.7	0.458379	23 52
9	19 56 21.31	39.50	17 57 46.1	2 7.5	0.458955	23 54
		- 38.96		- 2 6.2		
10	19 55 42-35	38-39	-17 59 52.3	2 4.9	0.459573	23 56
11	19 55 3.96	37-77	18 1 57.2	2 3.6	0.460231	23 58
12	19 54 26.19	37-14	18 4 0.8	2 2.2	0.460928	24 I
13	19 53 49.05	36.48	18 6 3.0	2 0.6	0.461664	24 3
14	19 53 12.57		18 8 3.6		0.462438	24 6
15	19 52 36.77	35.80	-18 10 2.7	-1 59.1		24 8
-		35.09		I 57.5	0.463251	
16		34.35		1 55.8	0.464101	24 11
17	19 51 27.33	33.58	18 13 56.0	1 54.0	0.464987	24 14
18	19 50 53.75	32.80	18 15 50.0	1 52.3	0.465910	24 18
19	19 50 20.95	-31.98	18 17 42.3	-1 50.4	0.466868	24 21
20	19 49 48.97		-18 19 32.7		0.467860	24 24
2.1	19 49 17.83	31.14	18 21 21.2	1 48.5	0.468887	24 27
	,,,,,		1		1 3000/	-4 4/

Opp. in AR. Juli 23 Größe = 12.6

(28) BELLONA 1911.

(28) BELLIONA 1911.						
12 ^h Mittl. Zeit	AR.	Dia.	Dekl.	Diff.	Log. Δ	AberrZt.
Juli 16	20 24 34 51		13 42 36.7		0.342162	18 ^m 16 ^s
		-47.6r	_	4 31.6	0.341644	18 15
17 18	20 23 46.90	48.c6	13 47 8.3	4 35.2		18 14
	20 22 58.84	48.46	13 51 43.5	4 38.6	0.341180	
19	20 22 10.38	48.81	13 56 22.1	4 41.9	0.340772	18 13
20	20 21 21.57	-49.12	14 1 4.0	-4 44.8	0.340418	18 12
21	20 20 32.45	.,	-14 5 48.8	4 47.6	0.340120	18 11
22	20 19 43.06	49.39	14 10 36.4		0.339878	18 10
23	20 18 53.46	49.60	14 15 26.6	4 50.2	0.339694	18 10
24	20 18 3.72	49.74	14 20 19.0	4 52.4	0.339566	18 10
8 25	20 17 13.88	49.84	14 25 13.5	4 54.5	0.339496	18 9
		49.90		-4 56.3		
26	20 16 23.98	49.90	-14 30 9.8	4 57.9	0.339483	18 9
27	20 15 34.08	49.84	14 35 7.7	4 59-4	0.339528	18 9
28	20 14 44.24	49.74	14 40 7.1	5 0.6	0.339631	18 10
29	20 13 54.50	49.59	14 45 7.7	5 1.4	0.339791	18 10
30	20 13 4.91	-49.38	14 50 9.1	-5 2.2	0.340009	18 11
31	20 12 15.53		-14 55 11.3		0.340285	18 11
Aug. 1	20 11 26.40	49.13	15 0 13.9	5 2.6	0.340618	18 12
2	20 10 37.56	48.84	15 5 16.9	5 3.0	0.341006	18 13
3	20 9 49.06	48.50	15 10 20.1	5 3.2	0.341450	18 14
4	20 9 0.94	48.12	15 15 23.1	5 3.0	0.341950	18 16
		47.69		-5 2.8		
5	20 8 13.25	47.22	-15 20 25.9	5 2.3	0.342504	18 17
6	20 7 26.03	46.70	15 25 28.2	5 1.6	0.343112	18 18
7	20 6 39.33	46.13	15 30 29.8	5 0.6	0.343774	18 20
8	20 5 53.20	45.52	15 35 30.4	4 59.4	0.344490	18 22
9	20 5 7.68		15 40 29.8		0.345260	18 24
IQ	20 4 22.81	-44.87	-15 45 28.0	-4 58.2	0.346082	18 26
11	20 3 38.61	44.20	15 50 24.9	4 56.9	0.346954	18 28
12	20 2 55.13	43.48	15 55 20.2	4 55.3	0.347877	18 30
13	20 2 12.41	42.72	16 0 13.8	4 53.6	0.348850	18 33
		41.92		4 51.8		22
14	20 1 30.49	-41.10		4 49.7	0.349872	
15	20 0 49.39	40.22	-16 9 55.3	4 47.5	0.350942	18 38
16	20 0 9.17	39.32	16 14 42.8	4 45-3	0.352060	18 41
17	19 59 29.85	38.39	16 19 28.1	4 45.3	0.353224	18 44
18	19 58 51.46		16 24 10.9		0.354434	18 47
19	19 58 14.04	37.42	16 28 51.0	4 40.1	0.355688	18 51
		- 36.41		-4 37.4		
20	19 57 37.63	35-37	-16 33 28.4	4 34.6	0.356986	18 54
21	19 57 2.26		16 38 3.0		0.358326	18 58

Opp. in AR. Juli 25 Größe = 10.8

(71) NIOBE 1911.

(71) NIOBE 1911.						
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
Juli 20	20 55 25.82	,	-26° 3′ 19.0		0.205606	13 20
21	20 54 12.64	-73.18		+3 57.6	0.205376	
22	20 52 58.90	73.74	25 59 21.4 25 55 18.2	4 3.2		
		74.21		4 8.7	0.205220	13 20
23	20 51 44.69	74-59	25 51 9.5	4 14.3	0.205138	13 20
24	20 50 30.10	-74.90	25 46 55.2	+4 20.1	0.205130	13 19
25	20 49 15.20	75.10	-25 42 35.1	4 25.8	0.205198	13 20
26	20 48 0.10		25 38 9.3		0.205343	13 20
27	20 46 44.87	75.23	25 33 37.7	4 31.6	0.205566	13 20
28	20 45 29.60	75.27	25 29 0.3	4 37-4	0.205866	13 21
29	20 44 14.38	75.22	25 24 17.1	4 43.2	0.206242	13 21
		-75.10		+4 48.9		
30	20 42 59.28	74.90	-25 19 28.2	4 54.6	0.206696	13 22
& 3I	20 41 44.38	74.61	25 14 33.6	5 0.4	0.207227	13 23
Aug. 1	20 40 29.77	74.23	25 9 33.2	5 6.2	0.207834	13 24
2	20 39 15.54	73.78	25 4 27.0	5 11.8	0.208516	13 26
3	20 38 1.76	-73.26	24 59 15.2	+5 17.6	0.209272	13 27
4	20 36 48.50		-24 53 57.6		0.210102	13 29
5	20 35 35.84	72.66	24 48 34.4	5 23.2	0.211006	13 30
6	20 34 23.86	71.98	24 43 5.8	5 28.6	0.211983	13 32
7	20 33 12.62	71.24	24 37 32.0	5 33.8	0.213032	13 34
8	20 32 2.20	70.42	24 31 53.2	5 38.8	0.214153	13 36
		-69.53		+5 43.6		
9	20 30 52.67	68.58	-24 26 9.6	5 48-3	0.215346	13 38
10	20 29 44.09	67.57	24 20 21.3	5 53.0	0.216608	13 41
II	20 28 36.52	66.49	24 14 28.3	5 57-4	0.217937	13 43
12	20 27 30.03	65.35	24 8 30.9	6 1.6	0.219334	13 46
13	20 26 24.68		24 2 29.3		0.220797	13 49
14	20 25 20.52	-64.16	-23 56 23.7	+6 5.6	0.222325	13 52
15	20 24 17.59	62.93	23 50 14.1	6 9.6	0.223916	13 55
16		61.64		6 13.2	0.225570	13 58
	20 23 15.95	60.29	23 44 0.9	6 16.7	0.227285	
17 18	20 22 15.66 20 21 16.76	58.90	23 37 44.2	6 20.0		14 1
10	20 21 10.70	-57.46	23 31 24.2	6 23.2	0.229059	14 5
19	20 20 19.30	55.97	-23 25 1.0	6 26.1	0.230892	14 8
20	20 19 23.33	54.43	23 18 34.9	6 28.8	0.232781	14 12
21	20 18 28.90	52.84	23 12 6.1	6 31.4	0.234725	14 16
22	20 17 36.06		23 5 34.7		0.236723	14 20
23	20 16 44.86	51.20	22 59 I.O	6 33.7	0.238772	14 24
		49.47		+6 35.8	0.240872	
24	20 15 55.39	47.71	-22 52 25.2	6 38.0	1	14 28
25	20 15 7.68		22 45 47.2		0.243020	14 32

Opp. in AR. Juli 31 Größe = 10.4

(108) HECUBA 1911.

(108) HECUBA 1911.						
12 ^h Mittl. Zeit	A R.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
	AR. 21 46 14.54 21 45 21.52 21 44 28.21 21 43 34.65 21 42 40.89 21 41 46.98 21 40 52.96 21 39 58.88 21 39 4.80 21 38 10.77 21 37 16.84 21 36 23.06 21 35 29.48 21 34 36.15 21 33 43.14 21 32 50.50 21 31 58.28 21 31 6.52 21 30 15.29 21 29 24.63 21 28 34.57 21 27 45.16 21 26 56.44 21 26 8.44	53.02 53.31 53.56 53.76 -53.91 54.02 54.08 54.08 54.03 -53.93 53.78 53.58 53.33 53.01 -52.64 52.22 51.76 51.23 50.66 -50.c6 49.41 48.72 48.00		Diff. -3 42.0 3 40.8 3 39.3 3 37.6 -3 35.7 3 33.5 3 31.1 3 28.5 3 25.8 -3 22.7 3 19.4 3 16.0 3 12.4 3 8.5 -3 4.4 3 0.2 2 55.8 2 51.2 2 46.3 -2 41.4 2 36.4 2 31.2 2 25.9	Log. Δ 0.347969 0.347739 0.347566 0.347394 0.347394 0.347453 0.347570 0.347745 0.347978 0.348269 0.348618 0.349025 0.349489 0.35011 0.350589 0.351223 0.351913 0.352657 0.353455 0.354307 0.355211 0.356168 0.357176	Aberr Zt. 18 "31
2 3	21 25 21.22 21 24 34.80	47.22 46.42 45.57	18 15 10.8 -18 17 25.7	2 20.4 -2 14.9 2 9.3	0.358233 0.359339	18 57
4 5 6 7	21 23 49.23 21 23 4.56 21 22 20.82 21 21 38.02	44.67 43.74 42.80	18 19 35.0 18 21 38.7 18 23 36.6 18 25 28.8	2 3.7 1 57.9 1 52.2	0.360494 0.361695 0.362942 0.364234	19 3 19 6 19 10 19 13
8 9 10 11 12	21 20 56.18 21 20 15.36 21 19 35.58 21 18 56.87 21 18 19.27 21 17 42.81 21 17 7.52	-41.84 40.82 39.78 38.71 37.60 -36.46 35.29	-18 27 15.1 18 28 55.5 18 30 30.1 18 31 58.7 18 33 21.3 -18 34 37.9	1 46.3 1 40.4 1 34.6 1 28.6 1 22.6 -1 16.6	0.365571 0.366951 0.368372 0.369834 0.371336	19 17 19 20 19 24 19 28 19 32 19 36
14	21 17 7.52		18 35 48.4		0.374457	19 41

Opp. in AR. Aug. 16 Größe = 11.7

(53) KALYPSO 1911

Mittl. Zeit	AR.	T. 1.00				
o .		Diff.	Dekl.	Diff.	Log. Δ	AberrZt.
Ant TA	h m 6	6	3°31′ 2.0	4.4	0.198236	m s
Sept. 14	0 14 24.47	-45.92		-7 24.9	, -	13 7
15	0 13 38.55	46.62	3 38 26.9	7 26.9	0.197070	13 5
16	0 12 51.93	47.30	3 45 53.8	7 28.5	0.195976	13 3
17	0 12 4.63	47-90	3 53 22.3	7 29.5	0.194954	13 1
18	0 11 16.73	-48.43	4 0 51.8	-7 30.0	0.194006	12 59
19	0 10 28.30		-4 8 21.8		0.193131	12 58
20	0 9 39.39	48.91	4 15 51.9	7 30.1	0.192331	12 56
2.1	0 8 50.05	49.34	4 23 21.5	7 29.6	0.191606	12 55
22	0 8 0.35	49.70	4 30 50.1	7 28.6	0.190957	12 54
23	0 7 10.37	49.98	4 38 17.1	7 27.0	0.190383	12 53
	, 5.	-50.20		−7 25. 0		
24	0 6 20.17	50.36	-4 45 42.I	7 22.4	0.189886	12 52
25	0 5 29.81	50.45	4 53 4.5	7 19.2	0.189467	12 51
& 2 6	0 4 39.36	50.47	5 0 23.7	7 15.6	0.189126	12 51
27	0 3 48.89	50.43	5 7 39.3	7 11.5	0.188862	12 50
28	0 2 58.46		5 14 50.8		0.188675	12 50
29	0 2 8.14	-50.32	-5 21 57.6	− ₇ 6.8	0.188565	12 50
	0 1 18.00	50.14		7 1.8	0.188532	
Okt. 1		49.90		6 56.2	0.188574	12 50
		49.59	5 35 55.6	6 50.2		12 50
2	23 59 38.51	49.20	5 42 45.8	6 43.8	0.188693	12 50
3	23 58 49.31	-48.77	5 49 2 9.6	-6 37.0	0.188887	12 50
4	23 58 0.54	48.28	<u>-5 56 6.6</u>		0.189155	12 51
5	23 57 12.26		6 2 36.3	6 29.7	0.189497	12 51
6	23 56 24.53	47-73	6 8 58.3	6 22.0	0.189912	12 52
7	23 55 37.41	47.12	6 15 12.2	6 13.9	0.190400	12 53
8	23 54 50.94	46.47	6 21 17.6	6 5.4	0.190960	12 54
	3 3 . 3 .	-45.75	1	-556.6		
9	23 54 5.19	44-97	-6 27 14.2	5 47-4	0.191590	12 55
10	23 53 20.22	44.11	6 33 r.6	5 37.9	0.192290	12 56
11	23 52 36.11	43.21	6 38 39.5	5 28.1	0.193058	12 58
12	23 51 52.90	42.27	6 44 7.6	5 17.9	0.193894	12 59
13	23 51 10.63		6 49 25.5		0.194795	13 I
TA	23 50 29.35	-41.28	-6 54 33.0	-5 7.5	0.195761	13 2
14	-	40.23	6 59 29.9	4 56.9	0.195701	
15		39.14	_	4 45.9	0.190791	13 4
16		38.∞		4 34.7		
17	23 48 31.98	36.8r	7 8 50.5	4 23.3	0.199038	13 8
18	23 47 55.17	-35.57	7 13 13.8	-4 11.8	0.200251	13 11
19	23 47 19.60		-7 17 25.6	4 0,0	0.201523	13 13
20	23 46 45.30	34.30	7 21 25.6	4 0.0	0.202851	13 15

Opp. in AR. Sept. 26 Größe = 11.4

(47) AGLAJA 1911.

(47) AGLAJA 1911.						
12 ^h Mittl. Zeit	AR.	. Diff.	Dekl.	Diff.	Log. Δ	A berr Zt.
Okt. 8 9 10 11 12	1 36 54.65 1 36 3.22 1 35 11.34 1 34 19.08 1 33 26.51 1 32 33.68	-51.43 51.88 52.26 52.57 -52.83	+12°47 32.5 12 44 45.5 12 41 53.8 12 38 57.7 12 35 57.4	-2 47.0 2 51.7 2 56.1 3 0.3 -3 4.2	0.233236 0.232923 0.232679 0.232505 0.232400	14 13 14 13 14 12 14 12 14 11
13 14 15 16	1 31 40.66 1 30 47.50 1 29 54.26 1 29 1.02	53.02 53.16 53.24 53.24 -53.17	12 32 53.2 12 29 45.4 12 26 34.2 12 23 20.0 12 20 3.1	3 7.8 3 11.2 3 14.2 3 16.9	0.232366 0.232403 0.232511 0.232692 0.232944	14 11 14 11 14 11 14 12 14 12
6° 18 19 20 21 22	1 28 7.85 1 27 14.80 1 26 21.94 1 25 29.34 1 24 37.06	53.05 52.86 52.60 52.28	+12 16 43.8 12 13 22.5 12 9 59.6 12 6 35.4 12 3 10.2	3 21.3 3 22.9 3 24.2 3 25.2	0.233268 0.233665 0.234134 0.234674 0.235284	14 13 14 14 14 15 14 16 14 17
23 24 25 26 27	1 23 45.18 1 22 53.76 1 22 2.84 1 21 12.49 1 20 22.79	51.42 50.92 50.35 49.70	11 59 44.3 11 56 18.1 11 52 51.9 11 49 26.2 11 46 1.2	-3 25.9 3 26.2 3 26.2 3 25.7 3 25.0	0.235966 0.236718 0.237540 0.238431 0.239391	14 18 14 20 14 21 14 23 14 25
28 29 30 31 Nov. 1	1 19 33.77 1 18 45.49 1 17 58.01 1 17 11.39 1 16 25.67	-49.02 48.28 47.48 46.62 45.72	+11 42 37.4 11 39 15.0 11 35 54.3 11 32 35.8 11 29 19.7	-3 23.8 3 22.4 3 20.7 3 18.5 3 16.1	0.240418 0.241511 0.242669 0.243892 0.245178	14 27 14 29 14 32 14 34 14 37
2 3 4 5 6	I 15 40.88 I 14 57.07 I 14 14.30 I 13 32.61 I 12 52.02	43.81 42.77 41.69 40.59	+ 11 26 6.4 11 22 56.1 11 19 49.2 11 16 45.9 11 13 46.7	3 13.3 3 10.3 3 6.9 3 3.3 2 59.2	0.246526 0.247934 0.249401 0.250926 0.252508	14 39 14 42 14 45 14 48 14 52
7 8 9 10 11	1 12 12.57 1 11 34.30 1 10 57.24 1 10 21.41 1 9 46.84 1 9 13.57	38.27 37.06 35.83 34.57 -33.27	+11 10 51.7 11 8 1.1 11 5 15.2 11 2 34.2 10 59 58.1 +10 57 27.1	2 50.6 2 45.9 2 41.0 2 36.1	0.254146 0.255838 0.257583 0.259379 0.261225	14 55 14 59 15 2 15 6 15 10
13	1 8 41.64	31.93	10 55 1.5	2 25.6	0.265064	15 18

Opp. in AR. Okt. 18 Größe = 10.8

(90) ANTIOPE TOTT

		(9 0) .	ANTIOPE I	911.		
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt_
Okt. 8	1 ^h 50 ^m 6.88		+8°42′52.2		0.300622	16 ^m 36 ^d
		-44.76	8 38 59.5	-3 52.7	_	
9	1 49 22.12	45.26	2 3/3	3 54.5	0.300294	16 35
IO	1 48 36.86	45.71	8 35 5.0	3 56.0	0.300026	16 35
II	1 47 51.15	46.11	8 31 9.0	3 57.2	0.299820	16 34
12	1 47 5.04	-46.46	8 27 11.8	-3 58.2	0.299675	16 34
13	1 46 18.58	46.76	+8 23 13.6		0.299591	16 34
14	1 45 31.82		8 19 14.6	3 59.0	0.299570	16 34
15	1 44 44.81	47.01	8 15 15.1	3 59-5	0.299612	16 34
16	I 43 57.60	47.21	8 11 15.4	3 59.7	0.299716	16 34
17	1 43 10.26	47.34	8 7 15.8	3 59.6	0.299884	16 34
		-47-43		-3 59.3		
18	1 42 22.83	47.46	+8 3 16.5	3 58.6	0.300114	16 35
19	1 41 35.37	47.44	7 59 17.9	3 57.7	0.300407	16 35
20	1 40 47.93	47.36	7 55 20.2	3 56.5	0.300763	16 36
P 21	1 40 0.57	47.23	7 51 23.7	3 54.9	0.301182	16 37
22	1 39 13.34		7 47 28.8		0.301664	16 38
23	1 38 26.30	-47.04	-1-7 43 35.8	-3 53.0	0.302212	16 40
24	I 37 39.49	46.81	7 39 45.0	3 50.8	0.302822	16 41
25	I 36 52.97	46.52	7 35 56.6	3 48.4	0.303494	16 42
2 6	1 36 6.78	46.19	7 32 10.8	3 45.8	0.304228	16 44
27	r 35 20.98	45.80	7 28 28.1	3 42.7	0.305021	16 46
		-45-35		-3 39-4		
28	1 34 35.63	44.87	+7 24 48.7	3 35.9	0.305874	16 48
29	1 33 50.76	44.34	7 21 12.8	3 32.0	0.306787	16 50
30	1 33 6.42		7 17 40.8	3 27.9	0.307759	16 53
31	1 32 22.67	43.75	7 14 12.9	3 27.9	0.308790	16 55
Nov. I	1 31 39.55	43.12	7 10 49.3		0.309879	16 58
2		-42.44		-3 19.0		
	1 30 57.11	41.73	+7 7 30.3 7 4 16.1	3 14.2	0.311024	17 0
3	1 30 15.38	40.99		3 9.2	0.312224	17 3
4	I 29 34.39	40.19	7 1 6.9	3 3.9	0.313477	17 6
5	1 28 54.20	39.36	6 58 3.0	2 58.6	0.314784	17 9
6	1 28 14.84	-38.5r	6 55 4.4	-2 52.9	0.316144	17 12
7	1 27 36.33		+6 52 11.5		0.317556	17 16
8	1 26 58.71	37.62	6 49 24.4	2 47.1	0.319018	17 19
9	1 26 22.02	36.69	6 46 43.3	2 41.1	0.320530	17 23
10	1 25 46.28	35.74	6 44 8.2	2 35.1	0.322090	17 27
11	1 25 11.53	34.75	6 41 39.4	2 28.8	0.323696	17 30
		-33.74		-2 22.4		
12	1 24 37.79	32.70	+6 39 17.0	2 16.0	0.325348	17 34
13	1 24 5.09	,	6 37 1.0		0.327046	17 39
			1		•	•

Opp. in AR. Okt. 21 Größe = 11.4

(37) FIDES 1911.

(37) FIDES 1911.						
12 ⁿ Mittl. Zeit	AR.	Diff.	Dekl.	Diff,	Log. Δ	AberrZt.
Okt. 12	1 54 26.24		+13 31 17.5		0.106706	10 37 s
13	I 53 34.10	-52.14	13 28 40.2	−2 37·3	0.105516	10 36
14	I 52 41.30	52.80	13 25 56.7	2 43.5	0.104410	10 34
-		53-40		2 49.3	0.103388	10 33
15 16		53-94	13 23 7.4	2 54.7	0.103300	
	1 50 53.96	-54.42	13 20 12.7	-2 59.8		10 31
17	I 49 59.54	54.83	+13 17 12.9	3 4.4	0.101602	10 30
18	1 49 4.71	55.17	13 14 8.5	3 8.7	0.100839	10 29
19	1 48 9.54	55.44	13 10 59.8	3 12.7	0.100164	10 28
20	1 47 14.10	55.65	13 7 47.1	3 16.1	0.099578	10 27
21	1 46 18.45		13 4 31.0		0.099082	10 26
of 22	1 45 22.68	-55.77	+13 1 11.8	-3 19.2	0.098675	10 26
23	I 44 26.86	55.82	12 57 49.8	3 22.0	0.098359	10 25
24	1 43 31.07	55.79	12 54 25.6	3 24.2	0.098132	10 25
=		55.68		3 26.0		1
2 5 2 6	1 42 35.39	55.48	12 50 59.6	3 27.4	0.097996	10 25
20	1 41 39.91	-55.19	12 47 32.2	-3 28.4	0.097952	10 25
27	I 40 44.72	54.84	+12 44 3.8	3 28.9	0.097998	10 25
28	1 39 49.88		12 40 34.9	3 29.0	0.098136	10 25
29	1 38 55.48	54.40	12 37 5.9	3 28.6	0.098362	10 25
30	1 38 1.61	53.87	12 33 37.3	3 27.8	0.098677	10 26
31	1 37 8.36	53.25	12 30 9.5		0.099082	10 26
Nov. 1	1 36 15.79	-52.57	+12 26 42.9	-3 26.6	0.000575	10 27
2		51.80		3 25.0	0.099575	10 27
	1 35 23.99	50.93	12 23 17.9	3 22.9		
3	1 34 33.06	49.99	12 19 55.0	3 20.3	0.100817	10 29
4	I 33 43.07	48.98	12 16 34.7	3 17.4	0.101565	10 30
5	1 32 54.09	-47.89	12 13 17.3	-3 14.2	0.102397	10 31
6	1 32 6.20	46.73	+12 10 3.1	3 10.5	0.103311	10 33
7	1 31 19.47	1	12 6 52.6		0.104305	10 34
8	I 30 33.95	45.52	12 3 46.2		0.105378	10 35
9	1 29 49.70	44.25	12 0 44.1	3 2.1	0.106529	10 37
IO	1 29 6.76	42.94	11 57 46.7	2 57-4	0.107757	10 39
**	1 28 25.18	-41.58		-2 52.2		
11		40.18	+11 54 54.5	2 46.7	0.109059	10 41
12	1 27 45.00	38.72	11 52 7.8	2 40.9	0.110435	10 43
13	1 27 6.28	37.19	11 49 26.9	2 34.9	0.111883	10 45
14	1 26 29.09	35.62	11 46 52.0	2 28.4	0.113401	10 47
15	I 25 53.47	-34.02	11 44 23.6	-2 21.6	0.114988	10 50
16	1 25 19.45		+11 42 2.0		0.116642	10 52
17	I 24 47.07	32.38	11 39 47.6	2 14.4	0.118360	10 55
,	1 '' '		1 ",		1	1 33

Opp. in AR. Okt. 22 Größe = 9.5

(241) GERMANIA TOTT

(241) GERMANIA 1911.						
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff,	Log. Δ	AberrZt.
Okt. 16	2 26 19.50		+21 53 4.0		0.271517	15 31 ⁴
17		-45.31		-3 46.1	0.270759	15 30
18	2 25 34.19	46.00	21 49 17.9	3 54.2		
	2 24 48.19	46.64	21 45 23.7	4 2.3	0.270062	15 28
19	2 24 1.55	47.21	21 41 21.4	4 10.0	0.269427	15 27
20	2 23 14.34	-47.72	21 37 11.4	-4 17.7	0.268854	15 26
21	2 22 26.62		+21 32 53.7		0.268344	15 25
22	2 21 38.44	48.18	21 28 28.8	4 24.9	0.267898	15 24
23	2 20 49.87	48.57	21 23 56.7	4 32.1	0.267518	15 23
24	2 20 0.97	48.90	21 19 17.8	4 38.9	0.267203	15 22
25	2 19 11.80	49.17	21 14 32.4	4 45-4	0.266953	15 22
		-49.38		-4 51.7	, , , ,	
2 6	2 18 22.42	49.51	+21 9 40.7	4 57.6	0.266771	15 21
27	2 17 32.91	49.60	21 4 43.1	5 3.2	0.266654	15 21
28	2 16 43.31	49.61	20 59 39.9	5 8.6	0.266605	15 21
29	2 15 53.70	49.56	20 54 31.3		0.266623	15 21
8 30	2 15 4.14		20 49 17.8	5 13.5	0.266708	15 21
		-49.46		-5 18.2		
31	2 14 14.68	49.28	+20 43 59.6	5 22.5	0.266860	15 21
Nov. 1	2 13 25.40	49.06	20 38 37.1	5 26.4	0.267080	15 22
2	2 12 36.34	48.77	20 33 10.7	5 30.0	0.267367	15 23
3	2 11 47.57	48.42	20 27 40.7	5 33.2	0.267720	15 23
4	2 10 59.15	48.02	20 22 7.5	-5 36.1	0.268140	15 24
5	2 10 11.13		+20 16 31.4		0.268626	15 25
6	2 9 23.57	47.56	20 10 52.8	5 38.6	0.269179	15 26
7	2 8 36.51	47.06	20 5 12.0	5 40.8	0.269796	15 28
8		46.49	19 59 29.5	5 42.5	0.270479	15 29
	, ,	45.88		5 44.0	0.271226	
9	2 7 4.14	-45.21	19 53 45.5	-5 45.0	0.2/1220	15 31
10	2 6 18.93	44.50	+19 48 0.5	5 45.8	0.272037	15 32
II	2 5 34.43	43.72	19 42 14.7	5 46.0	0.272912	15 34
12	2 4 50.71		19 36 28.7		0.273849	15 36
13	2 4 7.80	42.91	19 30 42.8	5 45.9	0.274848	15 39
14	2 3 25.75	42.05	19 24 57.3	5 45.5	0.275908	15 41
		-41.13		-5 44.6		
15	2 2 44.62	40.18	+19 19 12.7	5 43-3	0.277029	15 43
16	2 2 4.44	39.17	19 13 29.4	5 41.7	0.278209	15 46
17	2 I 25.27	38.13	19 7 47.7	5 39.7	0.279447	15 49
18	2 0 47.14	37.03	19 2 8.0	5 37-3	0.280743	15 51
19	2 0 10.11		18 56 30.7		0.282095	15 54
20	1 59 34.20	-35.9r	+18 50 56.2	-5 34.5	0.283503	15 57
21	1 58 59.46	34-74	18 45 24.9	5 31.3	0.284963	16 I
41	1 50 59.40	1	10 45 44.9		0.204903	101

Opp. in AR. Okt. 30 Größe = 10.8

(26) PROSERPINA 1911.

(26) PROSERPINA 1911.						
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Di 0 .	Log. Δ	AberrZt.
Okt. 28	h m s	я	+17°59′3.2	, ,	0.281851	15"54"
	3 14 34.59	-53.02		-2 19.4	0.281071	
29	3 13 41.57	53.71	17 56 43.8	2 22.8	0.280354	15 52
30	3 12 47.86	54.36	17 54 21.0	2 26.0		15 51
Nov. 1	3 11 53.50	54-95	17 51 55.0	2 29.1	0.279700	15 49
Nov. I	3 10 58.55	-55.48	17 49 25.9	-2 32.0	0.279110	15 48
2	3 10 3.07		+17 46 53.9	2 34.8	0.278585	15 47
3	3 9 7.12	55.95	17 44 19.1	-	0.278125	15 46
4	3 8 10.75	56.37	17 41 41.6	2 37.5	0.277731	15 45
5	3 7 14.03	56.72	17 39 1.5	2 46.1	0.277403	15 44
6	3 6 17.01	57.02	17 36 19.1	2 42.4	0.277141	15 44
-		-57.25		-2 44.5		
7 8	3 5 19.76	57-44	+17 33 34.6	2 46.4	0.276947	15 43
	3 4 22.32	57.56	17 30 48.2	2 48.2	0.276821	15 43
9	3 3 24.76	57.61	17 28 0.0	2 49.6	0.276763	15 43
10	3 2 27.15	57.61	17 25 10.4	2 51.0	0.276773	15 43
8 11	3 I 29.54		17 22 19.4	-2 52.0	0.276851	15 43
12	3 0 32.00	- 57-54	+17 19 27.4		0.276997	15 43
13	2 59 34.60	57.40	17 16 34.7	2 52.7	0.277211	15 44
14	2 58 37.40	57.20	17 13 41.4	2 53.3	0.277493	15 45
15	2 57 40.46	56.94	17 10 47.8	2 53.6	0.277844	15 45
16	2 56 43.85	56.61	17 7 54.2	2 53.6	0.278264	15 46
		-56.22		-2 53.4		1
17	2 55 47.63	55.77	+17 5 0.8	2 53.0	0.278751	15 47
18	2 54 51.86	55.25	17 2 7.8	2 52.1	0.279305	15 48
19	2 53 56.61	54.66	16 59 15.7	2 51.0	0.279925	15 50
20	2 53 1.95	54.02	16 56 24.7	2 49.7	0.280611	15 51
21	2 52 7.93		16 53 35.0		0.281363	15 53
22	2 51 14.60	-53.33	+16 50 46.8	2 48.2	0.282179	15 55
23	2 50 22.02	52.58	16 48 0.6	2 46.2	0.283058	15 57
24	2 49 30.26	51.76	16 45 16.6	2 44.0	0.283999	15 59
25	2 48 39.37	50.89	16 42 34.9	2 41.7	0.285003	16 1
26		49.98		2 39.0	0.286067	
	2 47 49.39	-49.03	16 39 55.9	-2 36.2		
27	2 47 0.36	48.02	+16 37 19.7	2 33.0	0.287189	16 6
28	2 46 12.34	46.98	16 34 46.7	2 29.5	0.288369	16 8
2 9	2 45 25.36		16 32 17.2	2 26.0	0.289607	16 11
30	2 44 39.46	45.90	16 29 51.2	2 22.2	0.290900	16 14
Dez. 1	2 43 54.70	44.76	16 27 29.0		0.292247	16 17
2		-43.58	+16 25 10.8	-2 18.2	0.293647	16 20
2,	2 43 11.12	42.38		2 13.8		16 23
3	2 42 28.74		16 22 57.0		0.295100	10 23

Opp. in AR. Nov. 11

Größe = 11.0

(288) GLAUKE 1911.

	1	(288)	GLAUKE 1	911.		1
12 ^h Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	AberrZt
Nov. 1	4 8 37.61		+15 19 31.9	P 19	0.353679	18 ^m 45
2	4 7 54.11	-43.50	15 17 2.8	-2 29.1	0.352348	18 42
3	4 7 9.62	44-49	15 14 32.7	2 30.1	0.351064	18 39
4	4 6 24.17	45-45	15 12 1.7	2 31.0	0.349829	18 36
5	4 5 37.81	46.36	15 9 29.7	2 32.0	0.348644	18 32
		-47-24		-2 32.6		,
6	4 4 50.57	48.09	+15 6 57.1	2 33-3	0.347510	18 29
7	4 4 2.48	48.90	15 4 23.8	2 33.9	0.346427	18 27
8	4 3 13.58	49.65	15 1 49.9	2 34.2	0.345397	18 24
9	4 2 23.93	50.38	14 59 15.7	2 34.5	0.344420	18 22
10	4 1 33.55	-51.05	14 56 41.2	-2 34.6	0.343498	18 19
11	4 0 42.50		+14 54 6.6		0.342631	18 17
12	3 59 50.82	51.68	14 51 32.0	2 34.6	0.341821	18 15
13	3 58 58.55	52.27	14 48 57.5	2 34.5	0.341067	18 13
14	3 58 5.75	52.80	14 46 23.3	2 34.2	0.340371	18 TI
15	3 57 12.47	53.28	14 43 49.6	2 33.7	0.339734	18 10
		-53.71		-2 33.1		
16	3 56 18.76	54.08	+14 41 16.5	2 32.3	0.339156	18 8
17	3 55 24.68	54.40	14 38 44.2	2 31.3	0.338637	18 7
18	3 54 30.28	54.67	14 36 12.9	2 30.I	0.338178	18 6
19	3 53 35.61	54.87	14 33 42.8	2 28.9	0.337780	18 5
20	3 52 40.74	-55.02	14 31 13.9	2 27.3	0.337443	18 4
21	3 51 45.72		+14 28 46.6		0.337167	18 3
8 22	3 50 50.61	55.11	14 26 20.9	2 25.7	0.336953	18 3
23	3 49 55.46	55.15	14 23 57.1	2 23.8	0.336800	18 2
24	3 49 0.33	55.13	14 21 35.3	2 21.8	0.336708	18 2
25	3 48 5.28	55.05	14 19 15.7	2 19.6	0.336677	18 2
-		-54.90		2 17.2		
26	3 47 10.38	54.72	+ 14 16 58.5	2 14.6	0.336708	
27	3 46 15.66	54-47	14 14 43.9	2 12.0	0.336800	18 3
28	3 45 21.19	54.16	14 12 31.9	2 9.1	0.336952	18 3
29	3 44 27.03	53.81	14 10 22.8	2 6.0	0.337165	18 3
30	3 43 33.22	53.39	14 8 16.8	-2 2.9	0.337438	18 4
Dez. 1	3 42 39.83		+14 6 13.9	· ·	0.337770	18 5
2	3 4r 46.89	52.94	14 4 14.3	1 59.6	0.338161	18 6
3	3 40 54.46	52-43	14 2 18.3	1 56.0	0.338611	18 7
4	3 40 2.59	51.87	14 0 25.8	1 52.5	0.339118	18 8
5	3 39 11.33	51.26	13 58 37.2	1 48.6	0.339682	18 10
		-50.61		-r 44.8		
6	3 38 20.72	49.91	+13 56 52.4	1 40.7	0.340303	18 11
7	3 37 30.81		13 55 11.7		0.340979	18 13

Opp. in AR. Nov. 22

Größe = 13.3

NACHWEISUNGEN ÜBER DIE KLEINEN PLANETEN (1) – (691).

Zur genaueren Bezeichnung derjenigen Stellen, an welchen die betreffenden Mitteilungen über die kleinen Planeten sich befinden, sind bei sämtlichen hier benutzten Zeitschriften, nämlich bei den Astronomischen Nachrichten (A. N.), dem Bulletin Astronomique (B. A.), dem Astronomical Journal (A. J.), den Monthly Notices (M. N.), den Lick Observatory Bulletins (L. B.), den Transvaal Observatory Circulars (T. C.) die Band- und Seitenzahlen angegeben.

A. Beobachtungen.

Angaben über genäherte Positionen und Ephemeridenkorrektionen sind durch ein Sternchen neben der Jahreszahl gekennzeichnet.

Nr. und Name		Beobachtungsort	Opposition	Publikation
ı Ceres		Toulouse	1909	B. A. 27, 173
		Marseille	»	» » 27, 357
2 Pallas	.	Genf	»	A. N. 183, 141
		Nizza	>>	B. A. 27, 34
		Toulouse	»	» » 27, 173
		Marseille	»	» » 27, 357
3 Juno		Columbus	1908	A. N. 182, 387
		Greenwich	»	M. N. 70, 248
		Marseille	»	B. A. 27, 66
		Heidelberg	1909*	A. N. 183, 191
		Nizza	1909/10	В. Л. 27, 360
4 Vesta		Columbus	1908	A. N. 182, 387
		Nizza	1909	B. A. 27, 34
		Toulouse	»	» » 27, 173
		Marseille	>>	» » 27, 356
6 Hebe		Nizza	1910	» » 27, 360
		Heidelberg	1910*	Λ. Ν. 183, 427
7 Iris		Nizza	1909	B. A. 27, 35
		Tokio	>>	A. N. 184, 343
		Heidelberg	1910*	» » 186, 32
8 Flora		Greenwich	1908	M. N. 70, 247
		Paris	>>	B. A. 27, 161, 165
		Düsseldorf	1909	A. N. 184, 61
		Paris .	>>	В. Л. 27, 130
		Wien	>>	A. N. 184, 321
		Poughkeepsie .	>>	A. J. 26, 136
		Nizza	>>	B. A. 27, 360
		des Moines	1909/10	A. N. 185, 325

NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (75)

Nr. und Name	Nr. und Name Beobachtungsort		Publikation	
9 Metis	Heidelberg	1910*	A. N. 183, 312	
	Taunton	»	» » 184, 71	
	Nizza	1910	В. А. 27, 361	
10 Hygiea	Nizza	»	» » 27, 361	
11 Parthenope	Columbus	1908	A. N. 182, 387	
·	Düsseldorf	1909	» » 184, 61	
	Nizza	»	B. A. 27, 362	
12 Victoria	Nizza	1910	» » 27, 362	
13 Egeria	Düsseldorf	1910*	A. N. 184, 85	
	Heidelberg	>>	» » 184, 99, 1∞, 175	
	Paris	>>	B. A. 27, 270	
	Nizza	>>	» » 27, 362	
14 lrene	Nizza	1909	» » 27, 35	
	Marseille	»	» » 27, 66	
15 Eunomia	Nizza	>>	» » 27, 36	
	Nizza	1910	» » 27, 362	
16 Psyche	Tokio	1909	A. N. 184, 343	
17 Thetis	Greenwich	1908	M. N. 70, 248	
	Besançon	>>	B. A. 27, 89	
			A. N. 184, 165	
	Düsseldorf	1910*	» » 183, 311	
	Paris	1910	B. A. 27, 269	
19 Fortuna	Greenwich	1908	M. N. 70, 247	
	Genf	1909	A. N. 183, 141	
	Paris	>>	B. A. 27, 39	
	Ann Arbor	>>	A. J. 26, 82	
	Marseille	>>	B. A. 27, 160	
20 Massalia	Nizza	1910	» » 27, 363	
21 Lutetia	Heidelberg	1909*	A. N. 182, 374	
22 Kalliope	Washington .	1909	A. J. 26, 41	
	Kopenhagen .	30	A. N. 183, 333	
23 Thalia	. Marseille	»	B. A. 27, 30	
	Nizza	»	» » 27, 36	
	Marseille	»	» » 27,66	
24 Themis	. Greenwich	1908	M. N. 70, 246	
	Düsseldorf	1909	A. N. 184, 61	
	Tokio	>>	» » 184, 343	
25 Phocaea	. Nizza	>>	В. Л. 27, 36	
26 Proserpina	. Zosè	1907	A. N. 185, 65	
	Greenwich	1907/08	M. N. 70, 245	
	Düsseldorf	1909	A. N. 184, 61	
	Marseille	>>	B. A. 27, 30	
	Heidelberg	1910	A. N. 185, 275	
27 Euterpe	. Marseille	1909	B. A. 27, 30	
	Tokio	»	A. N. 184, 343	

(76) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
28 Bellona	Washington	1008	A. J. 26, 40
20 Denona	Washington . Greenwich	1908	M. N. 70, 248
		» »	A. N. 185, 67
		ì	» » 184, 349
	Heidelberg	1910*	» » 184, 364, 185, ₁₄
29 Amphitrite	Düsseldorf	» T000	» » 184, 63
29 Amphitme		1909	» » 184, 85, 99
	Heidelberg	1909/10*	B. A. 27, 363
30 Urania	Heidelberg	1909/10	A. N. 182, 373
32 Pomona	Heidelberg	1909	» » 183, 311, 312
35 Leukothea	Heidelberg	-	» » 182, 334
33 Deakothea	Paris	1909*	B. A. 27, 129
37 Fides	Greenwich .	1909	M. N. 70, 245
5/ Flues	Düsseldorf	1909	A. N. 184, 63
	Cincinnati) 1909)	A. J. 26, 83
	Tokio	»	A. N. 184, 343
39 Lactitia	Washington .	1908	A. J. 26, 39
39 Buchtla	Nizza	1909	B. A. 27, 364
42 Isis	Washington .) y	A. J. 26, 41
43 Ariadne	Zose	1907	A. N. 185, 65
73 22224476 1 2 1 1 1	Washington .	1909	A. J. 26, 41
	Kopenhagen .	1910*	A. N. 186, 32
44 Nysa	Padua*)	1907	» » 184, 207
44 113500	Nizza	1909	B. A. 27, 37
45 Eugenia	Heidelberg	1910*	A. N. 183, 428
7) Mgc1110	Taunton	»	» » 184, 71
46 Hestia	Greenwich	1908	M. N. 70, 246
7	Zose	»	A. N. 185, 67
	Nizza	1909	B. A. 26, 417
	Ann Arbor.) »	A. J. 26, 82
47 Aglaja	Greenwich .	1908	M. N. 70, 246
48 Doris	Wien	1909	A. N. 184, 321
50 Virginia = [1909 IC].	Rom) 1909)	» » 183, 111
jg	Greenwich	» »	» » 184, 71
	Cincinnati .	»	A. J. 26, 83
	Wien	»	A. N. 184, 321
51 Nemausa	Nizza	»	B. A. 27, 37
53 Kalypso	Zose	1907	A. N. 185, 65
55 Pandora	Heidelberg	1910*	» » 183, 295
57 Mnemosyne	Greenwich	1908	M. N. 70, 248
<i>y</i> ,	Besançon) »	B. A. 27, 89
	27.0011,011	"	A. N. 184, 165
	Paris	»	B. A. 27, 162, 165
	Paris	1909	» » 27, 40
	Düsseldorf) 1909 »	A. N. 184, 63

^{*)} In A. N. 177, 361 mit (287) Nephthys bezeichnet.

NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (77)

Nr. und Name		Beobachtungsort	Opposition	Publikation
57 Mnemosyne		Mundenheim .	1909	A. N. 184, 167
J/ 2000000000000000000000000000000000000		Kopenhagen .	»	» » 185, 1
		Santiago de Chile	»	» » 185, 51
58 Concordia		Düsseldorf	>>	» » 184, 63
J			1910*	» » 185, 295
63 Ausonia		Kopenhagen .	1909	» » 183, 331
64 Angelina		Kopenhagen .	»	» » 183, 331
65 Cybele		Besançon	1908	» » 184, 165
- 5 0,0020 1 1 1 1			-3	B. A. 27, 89
		Paris	1909	» » 27, 130
67 Asia		Kopenhagen .	1910*	A. N. 185, 31
68 Leto		Heidelberg	1909*	» » 183, 15, 16, 191
		Düsseldorf	1909	» » 184, 63
		Cincinnati) »	A. J. 26, 83
		Paris	»	B. A. 27, 130
		Mundenheim .	»	A. N. 184, 167
		Kasan	»	» » 185, 21
70 Panopaea		Taunton	1909*	» » 183, 335
71 Niobe		Zôsè	1907	» » 185,65
/1 Mooc		Düsseldorf	1910*	» » 183, 311
		Paris	1910	B. A. 27, 269
74 Galatea		Heidelberg	1910*	A. N. 183, 295
78 Diana	•	Rom	1908	» » 183, 225
70 Бигупоте		Washington .) »	A. J. 26, 39
/9 Enryhome		Greenwich	»	M. N. 70, 248
		Heidelberg	1909*	A. N. 182, 373, 374
		Genf	1909	» » 183, 141
		Düsseldorf) 1909)	» » 184, 63
		Cincinnati	»	A. J. 26, 83
		Paris	»	B. A. 27, 129
		Mundenheim .	<i>"</i>	A. N. 184, 167
		Kasan	» »	» » 185, 21
		Santiago de Chile	»	» » 185, 51
		Poughkeepsie .	<i>"</i>	A. J. 26, 136
		Nizza		
82 Alkmene		Paris	» »	B. A. 27, 364
	•	Heidelberg		» » 27, 40 A. N. 183, 191
84 Klio		Düsseldorf	1909*	
			1909	» » 184, 63
		Paris	>>	B. A. 27, 130
R6 Camala		Kopenhagen .	» ************************************	A. N. 185, 3
36 Semele		Heidelberg	1909*	» » 183, 16
Da Iulia		Kopenhagen .	1909	» » 185, 3
B9 Julia		Kopenhagen .	>>	» » 183, 331
or Aegina		Heidelberg	1910*	» » 184, 224
	- 1	Paris	1910	В. Л. 27, 270

(78) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
92 Undina	Greenwich	1908	M. N. 70, 248
93 Minerva	Washington .	»	A. J. 26, 40
95 Arethusa	Genf	1909	A. N. 183, 141
95 Michiasa	Paris))	B. A. 27, 40
	Düsseldorf	*	A. N. 184, 63
	Marseille	»	B. A. 27, 95
100 Hekate	Kopenhagen .	»	A. N. 183, 333
TOD HERALE	Heidelberg	1910*	» » 184, 85
104 Klymene	Heidelberg)	» » 184, 86
104 Riymene	Taunton	»	» » 184, 237
105 Artemis	Washington .	1908	A. J. 26, 39
106 Dione	Greenwich) 1908 »	
100 Dione	Heidelberg	1910*	M. N. 70, 248
) 1910 »	A. N. 183, 427 » » 184, 85
TOR Camilla	Kopenhagen .		
107 Camilla	Heidelberg	»	
Yo ⁰ Thombo		» ************************************	» » 184, 159 B. A. 26, 417
108 Hecuba		1909	
770 I - 3:-	Düsseldorf	»	A. N. 184, 63
IIO Lydia	Rom	1908	» » 183, 225
III Ate	Washington .	>>	A. J. 26, 39
576 A	Wien	1910	A. N. 183, 223
113 Amalthea	Greenwich	1908	M. N. 70, 247
	Paris	>>	B. A. 27, 162, 165
	Düsseldorf	1909	A. N. 184, 63
	Mundenheim .	>	» » 184, 167
	Kopenhagen .	>>	» » 185, 3
	Kasan	»	» » 185, 21
115 Thyra	Washington .	1908	A. J. 26, 40
118 Peitho	Besançon	>>	В. А. 27, 90
	T)" 11 6		A. N. 184, 165
	Düsseldorf	1910*	» » 184, 71
	Heidelberg	>>	» » 184, 86, 99, 176
ren Tarbada	Paris	1910	B. A. 27, 269
120 Lachesis	Greenwich	1908	M. N. 70, 248
122 Gerda	Zôsè	1907	A. N. 185, 65
	Kopenhagen .	1910*	» » 183, 417
nam I.I.	Cincinnati	1910	A. J. 26, 101
127 Johanna	Taunton .	1909*	A. N. 183, 335
129 Antigone	Washington .	1908	A. J. 26, 39
134 Sophrosyne	Greenwich	>>	M. N. 70, 246
0 m l	Zôsè	»	A. N. 185, 67
138 $Tolosa = [1909 III.]$.	Wien	1909/10	» » 184, 3 33
139 Juewa	Mt. Hamilton .	1909	L. B. 5, 147
140 Siwa	Tokio	>>	A. N. 184, 345
143 Adria	Wien	»	» » 184, 321

NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (79)

Nr. und Name	Beobachtungsort	Opposition	Publikation
146 Lucina	Heidelberg	1910*	A. N. 184, 86
147 Protogeneia	Kopenhagen .	1909	» » 185, 1
148 Gallia	Paris	1910	B. A. 27, 270
153 Hilda	Taunton .	1910*	A. N. 184, 237
154 Bertha	Kopenhagen .	1909	» » 185, 3
31	Genf	»	» » 183, 141
	Paris	>	B. A. 27, 129
	Kasan	>>	A. N. 185, 21
161 Athor	Mt. Hamilton .	>>	L. B. 5, 148
163 Erigone	Nizza	»	B. A. 26, 417
172 Baucis	Heidelberg	1910*	A. N. 183, 427, 428
173 lno	Heidelberg	1909*	» » 182, 334
174 Phaedra	Wien	1909	» » 184, 321
176 Idunna	D .	»	В. А. 27, 38
178 Belisana	1	1910*	A. N. 184, 85
182 Elsa	TT - * 3 - 11	»	» » 186, 32
185 Eunike	TT . ' J . 11	>>	» » 184, 85, 99
)	Taunton	>>	» » 184, 237
190 Ismene	Nizza	1909	B. A. 27, 153
-9	Wien	»	A. N. 184, 321
	Kasan	>>	» » 185, 21
192 Nausikaa	Zosè	1907	» » 185, 65
195 Eurykleia	Heidelberg	1910*	» » 186, 32
196 Philomela	Nizza	1909	В. Л. 27, 28
-9	Heidelberg	1909*	Λ. Ν. 182, 373
	Taunton .	*	» » 18 2 , 373
198 Ampella	Greenwich	1908	M. N. 70, 245
202 Chryseis	Washington .	1909	A. J. 26, 41
206 Hersilia	Heidelberg	1910*	A. N. 185, 210
208 Lacrimosa	Heidelberg	1909*	» » 183, 191
	Wien	1909	» » 184, 321
209 Dido	Taunton	1910*	» » 184, 237
211 Isolda	Kopenhagen .	»	» » 185, 407
	Heidelberg	>>	» » 186, 31
216 Kleopatra = [1910 <i>KR</i>]	Teramo	1910	» » 186, 15, 31
are mesperial	Heidelberg	1910*	» » 186, 15
	Kopenhagen .	1910	» » 186, 31
217 Eudora	Wien	1909	» » 184, 321
218 Bianca	Heidelberg.	1910*	» » 185, 210
221 Eos	Nizza	1909	B. A. 26, 417
	Washington .	»	A. J. 26, 41
	Kopenhagen .	>>	A. N. 183, 333
	Wien	>	» » 184, 321
	Heidelberg	1010*	» » 185, 209
222 Lucia	Heidelberg	»	» » 184, 86

(80) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name		Beobachtungsort	Opposition	Publikation
223 Rosa		Heidelberg	1910*	A. N. 185, 61
229 Adelinda = [Tau	nton 841	Taunton	1908*	» » 184, 71
229 Huomida — [144	nton oaj	Washington .	1908	A. J. 26, 40
233 Asterope		Paris	1910*	A. N. 186, 15
235 Carolina		Heidelberg) »	» » 184, 99
233 Caronna		Taunton	»	» » 184, 237
241 Germania		Düsseldorf	1909	» » 184, 65
241 Octmania		Cincinnati) 1909 »	A. J. 26, 83
		Paris	1910*	A. N. 185, 195
247 Eukrate		Paris) »	» » 186, 15
250 Bettina		Taunton	»	» » 184, 71
251 Sophia		Heidelberg	<i>"</i>	» » 184, 224
256 Walpurga		Heidelberg	1909*	» » 183, 15
270 Anahita	•	Zôsè	1909	» » 185, 67
2/0 Anama	•	Greenwich		M. N. 70, 246
		Cincinnati	1907/08	A. J. 26, 83
273 Atropos = [1910	INI	Heidelberg	1909	
275 Sapientia	7114] .	Heidelberg	1910*	A. N. 183, 312, 427 » » 183, 16
277 Elvira		Wien	1909*	
283 Emma	• •		1909	17 3
284 Amalia	• • • • •		1908	» » 183, 225
286 Iclea	•	Heidelberg	1910*	» » 183, 312, 427
287 Nephthys		Heidelberg		» » 184, 175
207 Nephrilys		Kopenhagen .	» »	» » 184, 363
288 Glauke		Heidelberg Greenwich	1	» » 185, 61
200 Glauke		Paris	1908	M. N. 70, 246
		***	1909 »	B. A. 27, 39
292 Ludovica				» » 27, 153
294 Felicia = [1910		Heidelberg	1910*	A. N. 184, 224
mı .	H_{L} .	Heidelberg	»	» » 183, 311, 427
		Heidelberg	1909*	» » 182, 334
303 Josephina 304 Olga		Rom	1909	» » 183, 229
		Heidelberg	1910*	» » 184, 99, 100, 22
306 Unitas		Rom Heidelberg	» »	» » 185, 195
308 Polyxo		Paris	» »	» » 185, 209
300 Polyxo		Columbus	1908	» » 185, 93
113 Onaidaea		Greenwich		» » 182, 387
			»	M. N. 70, 247
		Besançon	>>	B. A. 27, 90
		Domio	1000	A. N. 184, 165
		Paris	1909	B. A. 27, 40
		Nizza	»	» » 27, 153
		Wien	>>	A. N. 184, 321
Y Woudeless		Kopenhagen	»	» » 185, 1
318 Magdalena		Heidelberg	1909*	» » 183, 15
322 Phaeo		Kopenhagen .	1909	» » 185, 1

NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (81)

Nr. und Name	Beobachtungsort	Opposition	Publikation
324 Bamberga	Rom	1909	A. N. 183, 227
33 Badenia	** * 1 11	1909*	» » 182, 373, 374
133 Datteria			
on China	Kopenhagen .	1909	» » 185, 3
34 Chicago	Greenwich	>>	» » 184, 71
38 Budrosa	Kopenhagen .	»	» » 183. 331
44 Desiderata	Heidelberg	1909*	» » 183, 15, 191
45 Tercidina	Nizza	1909	B. A. 27, 153
48 May	Heidelberg	1910*	A. N. 184, 349
50 Ornamenta	Heidelberg	>	» » 183, 311
57 Ninina	Heidelberg	>>	» » 184, 100, 176
58 Appollonia	Heidelberg	»	» » 186, 31
61 Bononia	Nizza	1909	B. A. 26, 417
	Wien	>>	A. N. 184, 321
65 Corduba	Kopenhagen .	>>	» » 185, 1
72 Palma	Teramo	1910*	» » 186, 15
74 Burgundia	Heidelberg	2	» » 184, 224
76 Geometria	Kopenhagen .	»	» » 185, 295
79 Huenna	Heidelberg	1909*	» » 183, 15. 16
	Taunton	*	» » 183, 335
	Nizza	1909	B. A. 27, 158
	Kopenhagen .	»	A. N. 185, 3
82 Dodona	Heidelberg	1910*	» » 183, 295
83 Janina	Heidelberg	1909*	» » 183, 15, 16
og "allilla"	Taunton .	»	» » 183, 335
	Nizza	1909	B. A. 27, 158
	Kopenhagen .) 1909 »	A. N. 185, 3
Qr Ilmatan	Paris	1910*	» » 186, 15
85 Ilmatar		-	» » 184, 175
88 Charybdis	Heidelberg	»	
89 Industria	Taunton	1909*	» » 183, 335
90 Alma	Wien	1909	» » 184, 321
97 Vienna	Heidelberg	1910*	» » 185, 62
98 Admete = $[1907 AB]$.	Wien	1909	» » 184, 323
99 Persephone	Heidelberg	1909*	» » 183, 191
	Kopenhagen .	1909	» » 185, 5
	Nizza	»	B. A. 27, 153
02 Chloë	Washington .	1908	A. J. 26, 39
	Heidelberg	1909*	A. N. 182, 333
	Rom	1909	» » 183, 231
	Wien	>	» » 184, 323
03 Cyane	Nizza	>	B. A. 26, 417
	Wien	»	A. N. 184, 323
	Heidelberg	1910*	» » 185, 210
	Williamsbay .	1910	» » 185, 325
04 Arsinoë	Heidelberg	1909*	» » 185, 325 » » 183, 15
105 Thia	Heidelberg	>>	» » 183, 15

(82) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name		Beobachtungsort	Opposition	Publikation
405 Thia		Taunton	1909*	A. N. 183, 335
		Kopenhagen .	1909	» » 185, 3
406 Erna		Heidelberg	1910*	» » 186, 32
407 Arachne		Greenwich	1908	M. N. 70, 248
409 Aspasia		Kopenhagen .	1909	A. N. 183, 331
410 Chloris		Heidelberg	1910*	» » 183, 312
		Kopenhagen .	»	» » 183, 417
		Taunton	»	» » 184, 71
		Nizza	1910	B. A. 27, 263
4II Xanthe		Heidelberg	1909*	A. N. 182, 374
		Rom	1909	» » 183, 231
		Nizza	»	B. A. 27, 158
414 Liriope		Heidelberg	1910*	A. N. 184, 99
415 Palatia		Heidelberg	»	» » 183, 427, 428
416 Vaticana		Düsseldorf	»	» » 184, 191
417 Suevia		Heidelberg	>>	» » 184, 350
418 Alemannia		Heidelberg	1909*	» » 183, 16
		Rom	>>	» » 183, 125
		Taunton	1909/10*	» » 183, 336
		Nizza	1909	B. A. 27, 153
		Wien	>>	A. N. 184, 323
		Kopenhagen .	2	» » 185, 3
419 Aurelia		Heidelberg	1909*	» » 182, 373, 374
420 Bertholda		Rom	1909	» » 183, 231
		Nizza	>	B. A. 27, 28
		Paris	»	» » 27, 130
		Kopenhagen .	>>	A. N. 185, 3
423 Diotima		Kopenhagen .	»	» » 183, 331
		Paris	1910*	» » 184, 287
426 Hippo		Rom	1908	» » 183, 225
429 Lotis ·		Kopenhagen .	1909	» » 185, 1
431 Nephele		Wien	1910*	» » 183, 223
		Nizza	1910	B. A. 27, 263
432 Pythia		Paris	1910*	A. N. 184, 191
433 Eros		Santiago de Chile	>>	» » 184, 287
		Johannesburg .	1910	Т. С. 1.38
434 Hungaria		Heidelberg	1909*	A. N. 182, 374
437 Rhodia		Nizza	1909	B. A. 26, 418
439 ()hio		Heidelberg	1909*	A. N. 182, 333
T (1.11.2		Wien	1909	» » 184, 323
441 Bathilde		Nizza	»	B. A. 26, 418
131 1 6 3 34		Rom	»	A. N. 183, 227
442 Eichsfeldia		Heidelberg	1910*	» » 184, 99, 100
TO 1	-	Taunton	»	» » 184, 237, 238
443 Photographica .		Rom	1909	» » 183. 229

NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (83)

Nr. und Name	Beobachtungsort	Opposition	Publikation
444 Gyptis	Greenwich	1908	M. N. 70, 246
TTT OJPIIS	Nizza	1900	B. A. 26, 457
	Rom) 1909 »	A. N. 183, 229
	Marseille	»	B. A. 27, 31
	Paris	»	» » 27, 39
	Kopenhagen .	» »	A. N. 183, 333
	Düsseldorf	>	» » 184, 65
	Cincinnati		A. J. 26, 83
	Marseille	»	B. A. 27, 94
	Santiago de Chile	»	A. N. 185, 51
147 Valentine	Rom	»	» » 183, 231
14/ Varentine	Genf	»	» » 183, 141
	Nizza	»	_
	Paris	»	B. A. 27, 28 » » 27, 129
	Nizza	,	.///
	Marseille		
	Wien	» »	» » 27, 168
			A. N. 184, 323
	Kopenhagen .	» ************************************	» » 185, 1
151 Patientia	Heidelberg	1909*	» » 182, 374
	Rom	1909	» » 183, 231
	Düsseldorf	*	» » 184, 65
	Marseille	»	B. A. 27, 168
	Santiago de Chile	0	A. N. 185, 53
453 Tea	Paris	1908	B. A. 26, 415
	Heidelberg	1910*	A. N. 184, 224
456 Abnoba	Nizza	1909	B. A. 26, 418
	Rom	39	A. N. 183, 229
	Paris	»	B. A. 27, 38
	Heidelberg	1910*	A. N. 186, 31
460 Scania	Kopenhagen .	1909	» » 185, 3
	Nizza	»	B. A. 27, 154
	Wien	»	A. N. 184, 323
462 Eriphyla	Nizza	»	B. A. 27, 154
	Wien	>	A. N. 184, 323
470 Kilia	Wien	>>	» » 184, 323
471 Papagena	Rom	>>	» » 183, 227
	Düsseldorf	>>	» » 184, 65
	Bergedorf	1910*	» » 184, 191
	Heidelberg	»	» » 184, 224, 303
472 Roma	Greenwich	1908	M. N. 70, 246
	Nizza	1909	B. A. 26, 457
	Rom	»	A. N. 183, 229
	Paris	»	B. A. 27, 39
477 Italia	Nizza	»	» » 27, 154
478 Tergeste	Greenwich	1908	M. N. 70, 245

(84) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
478 Tergeste	Nizza	1909	B. A. 26, 418
.,	Rom	»	A. N. 183, 229
	Wien	»	» » 184, 323
	Paris	1910*	» » 185, 93
482 Petrina	Rom	1909	» » 183. 229
	Nizza	»	B. A. 27, 28
	Paris	20	» » 27, 129
	Wien	»	A. N. 184. 323
	Kopenhagen	>>	» » 185, 1
	Kasan	»	» » 185, 21
183 Seppina	Nizza	»	B. A. 26, 457
	Rom	»	A. N. 183, 229
	Paris	>>	B. A. 27, 38
	Kopenhagen .	20	A. N. 183, 333
185 Genua	Besançon	1908	B. A. 27, 90
			A. N. 184, 165
	Paris	»	В. Л. 27, 162, 165
	Heidelberg	1909*	A. N. 183, 191
	Paris	1909	B. A. 27, 130
	Nizza	»	» » 27, 154
487 Venetia	Rom	>>	A. N. 183, 227
	Kopenhagen .	»	» » 183, 331
	Heidelberg	1910*	» » 185,61
190 Veritas	Rom .	1908	» » 183, 225
	Heidelberg	1910*	» » 183, 295. 311
	Nizza	1910	B. A. 27, 263
194 Virtus	Zôse	1907	A. N. 185.65
	Heidelberg	1910*	» » 184, 85
	Wien	36	» » 184, 85
	Paris	1910	B. A. 27, 269
198 Tokio	Rom	1909	A. N. 183, 229
	Kopenhagen .	»	» » 183, 333
	Wien	>>	» » 184, 323
501 Urhixidur	Heidelberg	1910*	» » 184, 224
503 Evelyn	Greenwich	1908	M. N. 70, 247
505 Cava	Kopenhagen .	1909	A. N. 183, 333
507 Laodica	Rom	»	» » 183, 227
508 Princetonia	Greenwich	1908	M. N. 70, 246
509 Iolanda	Nizza	1909	B. A. 26, 457
41.5	Rom	»	A. N. 183, 229
	Paris	»	B. A. 27, 39
SERVICE STATE	Wien	»	A. N. 184, 323
510 Mabella	Besançon	1908	» » 184, 165
			В. Л. 27, 90
511 Davida	Greenwich	»	M. N. 70, 247

NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (85)

Nr. un	d N	lam	e		Beobachtungsort	Opposition	Publikation
511 Davida .					Besançon	1908	B. A. 27, 90
							A. N. 184, 165
					Zôse	>>	» » 185, 67
					Nizza	1909	B. A. 26, 457
					Paris	»	» » 27, 39
					Düsseldorf	»	A. N. 184, 65
513 Centesima					Heidelberg	1909*	» » 183, 191
514 Armida .		٠			Heidelberg	>>	» » 183, 15
					Taunton	30	» » 183, 335
					Paris	1909	B. A. 27, 130
516 Amherstia					Rom	1908	A. N. 183, 225
521 Brixia .					Nizza	1909	B. A. 2 6, 418
					Rom	»	A. N. 183, 225
523 Ada					Rom	>>	» » 183, 225
					Kopenhagen .	>>	» » 183, 331
					Königsberg .	>>	» » 184, 169
					Nizza	1910*	» » 184, 347
34 Fidelio .					Heidelberg	*	» » 185, 275
26 Jena .					Rom	1909	» » 183, 227
27 Euryanthe					Nizza	»	B. A. 26, 418
, ,					Wien	>>	A. N. 184, 323
28 Rezia .					Rom .	>>	» » 183, 227
,	·			·	Königsberg .	»	» » 184, 169
					Heidelberg.	1910*	» » 184, 86, 99
					Wien	»	» » 184, 85
					Paris	1910	B. A. 27, 270
30 Turandot					Nizza	1910*	A. N. 184, 303
32 Herculina	•	•	•	.	Rom	1909	» » 183, 229
52 Hereuma	•	•	•	•	Marseille	1909 »	B. A. 27, 31
					Nizza	»	
					Paris		17.37
				- 1		3	» » 27, 38
					Kopenhagen . Düsseldorf	»	A. N. 183, 333
						»	» » 184, 65
					Cincinnati	>>	A. J. 26, 83
					Marseille	>>	В. Л. 27, 94
					Santiago de Chile	>>	A. N. 185, 53
33 Sara	•	•	٠	.	Heidelberg	1910*	» » 185, 209
34 Nassovia	٠	•			Nizza	1909	B. A. 26, 418, 457
		A			Paris	>>	» » 27, 38
					Wien	>>	A. N. 184, 323
35 Montague					Nizza	>>	B. A. 27, 154
36 Merapi .					Washington .	>>	A. J. 26, 41
					Rom	>>	A. N. 183, 227
					Heidelberg	1910*	» » 184, 223
					Kopenhagen .	>>	» » 184, 319

(86) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
537 Pauly	Nizza	1909	B. A. 26, 418
55/ 14419	Rom) »	A. N. 183, 229
	Kopenhagen .	»	» » 183, 333
	Wien		0
as Enjadonika		»	
538 Friederike	Nizza	»	B. A. 26, 458
	Wien	3	A. N. 184, 325
339 Pamina	Heidelberg	1909*	» » 182, 373
	Taunton	>>	» » 183, 335
	Rom	1909	» » 183, 231
	Paris	»	B. A. 27, 130
	Nizza	>>	» » 27, 154
	Kopenhagen .	>>	A. N. 185, 3
	Kasan	>>	» » 185, 21
340 Rosamunde	Heidelberg	1910*	» » 184, 350
541 Deborah	Nizza	1909	B. A. 27, 28
	Wien	»	A. N. 184, 325
542 Susanna	Rom	>>	» » 183, 231
	Nizza	>>	B. A. 27, 28
	Kopenhagen .	>>	A. N. 185, 3
343 Charlotte	Wien	>>	» » 184, 325
	Kopenhagen .	>>	» » 185, 1
346 Herodias	Kopenhagen .	1910*	» » 183, 239
	Heidelberg	»	» » 183, 311
	Rom	>>	» » 183, 307
547 Praxedis	Washington .	1908	A. J. 26, 39
	Greenwich	»	M. N. 70, 248
549 Jessonda	Wien	1910*	A. N. 184, 85
550 Senta	Rom	1908	» » 183, 225
	Heidelberg	1910*	» » 183, 312
	Nizza	1910	B. A. 27, 264
551 Ortrud	Heidelberg	1909*	A. N. 183, 191
,,,	Taunton .	*	» » 183, 335
	Nizza	1909	B. A. 27, 158
552 Sigelinde	Heidelberg	1909*	A. N. 182, 374
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Nizza	1909	B. A. 27, 158
554 Peraga	Washington .) 1909 »	A. J. 26, 41
)) 4 1 0 1 4 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Rom		
	Kopenhagen .	,,	A. N. 183, 227
555 Norma		» T000*	» » 183, 333
556 Phyllis	Heidelberg	1909*	» » 183, 16
opo inyms	Nizza	1909	B. A. 26, 418
	Rom	*	A. N. 183, 227
-0 a	Kopenhagen .	»	» » 183, 331
558 Carmen	Rom	1908	» » 183, 225
	Heidelberg	1910*	» » 183, 428
	Kopenhagen .	>>	» » 184, 85

Nr. und Name	Beobachtungsort	Opposition	Publikation
558 Carmen	Nizza	1910	B. A. 27, 264
559 Nanon	. Nizza	1909	» » 26, 419
	Heidelberg	1910*	A. N. 185, 61
562 Salome	. Nizza	1909	B. A. 26, 419
	Rom	»	A. N. 183, 227
563 Suleika	. Zôsè	1907	» » 185, 65
J- J	Rom	1909	» » 183, 227
	Paris	»	B. A. 27, 38
	Wien	»	A. N. 184, 325
	Heidelberg	1910*	» » 185, 62
	Arcetri	»	» » 185, 179
566 Stereoskopia	. Kopenhagen .	1909	» » 183, 331
300 ctorcoskojate	Heidelberg	1910*	» » 184, 99, 100
567 Eleutheria	. Heidelberg	»	» » 184, 223
569 Misa	Nizza	1909	B. A. 27, 154
309 11134	Wien) >	A. N. 184, 325
570 [1905 QX]	. Heidelberg	1910*	» » 185, 61
575 [1905 RE]	Wien	1909	» » 184, 325
578 [1905 RZ]	Greenwich	1908	M. N. 70, 247
5/6 [1905 112]	Rom	1909	A. N. 183, 231
	Nizza) »	B. A. 27, 29
	Wien	»	A. N. 184, 325
579 [1905 <i>SD</i>]	Greenwich	1908	M. N. 70, 247
581 Tauntonia	Greenwich) »	» » 70, 247
582 [1906 <i>SO</i>]	. Heidelberg	1910*	A. N. 183, 295
585 [1906 <i>TA</i>]	. Heidelberg))	» » 184, 175
505 [1900 121]	Rom	*	» » 184, 191
589 Croatia	Besançon	1908	» » 184, 165
509 Citatia	. Desauçon	1900	
	Paris	Tooo	B. A. 27, 90 » » 27, 130
	Nizza	1909	17, -3-
	Heidelberg		-// -JT
	Wien	1909*	A. N. 183, 15
	Kopenhagen .	1909	» » 184, 325 » » 185, 3
roe [roof WW]		»	57 5
593 [1906 TT]	. Heidelberg	1909*	» » 183, 191 » » 183, 225
ror [1006 772]	. Heidelberg	»	5/ 555
595 [1906 <i>TZ</i>]		1910*	» » 183, 295
596 [1906 <i>UA</i>]		1908	» » 183, 225
100 [2006 IIO]	Heidelberg	1909*	» » 183, 191
598 [1906 <i>UC</i>]	. Heidelberg	1910*	» » 183, 428, 184, 85
599 [1906 UJ]	. Heidelberg	»	» » 184, 100
([6 11])	Taunton	» T200	» » 184, 238
$600 [1906 \ UM]$. Washington .	1909	A. J. 26, 41
6 6 6 7 13	Taunton	1910*	A. N. 185, 141
603 [1906 <i>TJ</i>]	. Taunton .	>>	» » 184,71

(88) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Na	me	Beobachtungsort	Opposition	Publikation
606 [1906 <i>VB</i>] .		Heidelberg.	1910*	A. N. 186, 31
607 [1906 VC] .		Heidelberg))	» » 185, 210
509 [1906 VF].		Heidelberg	» »	» » 185, 62
615 [1906 VR] .		Nizza	1909	B. A. 26, 458
15 [1900 116].		Rom) 1909 »	A. N. 183, 229
		Wien	» »	» » 184, 325
STE Detrockes				» » 183, 239
517 Patroclus . 518 [1906 <i>VZ</i>] .		Heidelberg	1910*	
18 [1900 12].		Kopenhagen .	1909	» » 183, 333
Svo [voo6 H/0]		Heidelberg	1910*	» » 185, 61
519 [1906 WC].		Nizza	1909	B. A. 27. 155
(a. [a		Wien	»	A. N. 184, 325
623 [1907 X.J] .		Wien	>>	» » 184, 325
** 1.		Kopenhagen .	»	» » 185, 1
624 Hektor		Greenwich	1908	M. N. 70, 246
528 [1907 XT].		Heidelberg	1909:	A. N. 182, 334
		Nizza	1909	B. A. 27, 29
_		Wien	»	A. N. 184, 325
631 [1907 Y.J] .		Heidelberg	1909**	» » 182, 334
		Nizza	1909	B. A. 27, 159
		Wien	>>	A. N. 184, 325
633 [1907 ZM].		Heidelberg	1909*	» » 183, 191
638 [1907 ZQ] .		Washington	1.908	A. J. 26, 41
639 [1907 ZT] .		Heidelberg	1910*	A. N. 183, 311, 312
		Kopenhagen .	>>	» » 183, 417
642 [1907 ZY] .		Wien	>>	» » 184, 85
		Heidelberg	>>	» » 184, 99
645 [1907 AG].		Washington .	1909	A. J. 26, 41
		Heidelberg	1910*	A. N. 184, 176
		Taunton	>>	» » 184, 364
554 Zelinda		Greenwich	1908	M. N. 70, 246
1111.3		Rom .	1909	A. N. 183, 229
		Paris	»	B. A. 27, 39
		Marseille	>>	» » 27, 94
		Nizza	»	» » 27, 155
655 [1907 <i>BF</i>] .		Washington .	»	A. J. 26, 41
660 [1908 CC] .		Nizza	»	B. A. 26, 419
. , , .		Paris	»	» » 27, 39
		Washington .	» »	A. J. 26, 41
		Rom .		
		Düsseldorf	» »	A. N. 183, 229 » » 184, 65
662 Newtonia .		Princeton		» » 184, 85 » » 182, 358
ooz achioma .			1909*	
		Heidelberg.	»	» » 182, 373
		Taunton	»	» » 182, 374
		Paris	1909	В. Л. 27, 129
		Nizza	>>	» » 27, 155

Nr. und Name	Beobachtungsort	Opposition	Publikation
66 2 Newtonia	Wien	1909	A. N. 184, 325
670 [1908 DR]	Wien	1910*	» » 183. 223
5/5 [1900 D.N.]	Heidelberg))	» » 183, 311
	Nizza	1910	B. A. 27, 264
673 [1908 <i>EA</i>]	Heidelberg	1910*	A. N. 183, 295
674 Rachel	Greenwich	1908/09	M. N. 70, 248
7,4 111101101	Düsseldorf))	A. N. 184, 65
	Heidelberg.	1910*	» » 183, 428
	Rom))	» » 183, 343
	Paris		B. A. 27, 269
675 [1908 <i>DU</i>]		1910	A. J. 26, 40
676 [1909 <i>FN</i>]	Washington	1908	A. N. 184, 325
677 [1909 FR]		1909	
5// [1909 FA]		»	» » 183, 227
	Kopenhagen .	>>	» » 183, 331
See France Carl	Wien	>>	» » 184, 327
678 [1909 <i>FS</i>]	Wien . · .	>>	» » 184, 327
679 Pax	Rom	7	» » 183, 227
(0- [(1117]	Heidelberg	1910#	» » 184, 287
680 [1909 GW]	Rom	1909	» » 183, 229
Fun 1 -0)	Wien	>>	» » 184, 327
681 [1909 GZ]	Wien	>>	» » _184, 327
682 [1909 111]	Wien	>>	» » 184, 329
683 [1909 <i>HC</i>]	Wien	>>	» » 184, 329
684 [1909 <i>III</i>)]	. Wien	>>	» » 184, 329
685 [1909 HE]	Wien	>>	» » 184, 331
686 [1909 <i>IIF</i>]	. Wien	>>	» » 184, 331
	Kopenhagen .	>>	» » 185, 5
687 Tinette	. Heidelberg	1909*	» » 182, 334
	Wien	1909	» » 184, 331
688 Melanie	. Wien	>>	» » 184, 333
689 [1909 <i>HJ</i>]	Wien	>>	» » 184, 333
690 Wratislavia	. Taunton	1909*	» » 182, 374,
		1909/10*	183, 335, 336
	Düsseldorf	1909	» » 184, 65
	Cincinnati	»	A. J. 26, 101
	Wien	1909/10	A. N. 184, 335
691 Lehigh	. Taunton	1909/10*	» » 183, 207, 336,
		1 -1	184, 71

(90) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

[1901 HD] Heidelberg 1910 April 30°, Mai 12°	Nr. und Name	Beobachtungsort	Datum der Beobachtung	Publikation
[1908 BC] Taunton 1909 Aug. 11*, 14*		Heidelberg	1010 April 20* Mai 12*	A V 184 140 250
[1908 EJ]				
[1908 EK*] = Washington				" " 102, 3/4
[1908 EK*a] =	[1900 120]	washington .		A I 26 40
Taunton Solution	Inos FKal -	Washington		
[1909 GF] Rom 1909 Febr. 20, 23				
Wien				
Nov. 15, Dez. 6, 7, 13	[1909 1111]			" " 102, 333
[1909 HO]		Wien	Nov. 15. Dog 6 7. 12	» × ×84 225
Wien	[1000 H0]	Hoidelborg	» Okt 10*	» » 182, 222
	[1909 110]			
Wien	[roco HP]			
Heidelberg Wien W	[1909 111].			
Wien	[roco HO]		" Okt. 19, 20, 22	
[1909 HR] . Greenwich	[1909 114] .		" Okt. 19	
[1909 HS] Greenwich	[roos #P]			
[1909 HT] Greenwich Nokt. 5, 6, 8, 12 182, 373 [1909 HU] Heidelberg Okt. 17* 182, 373 [1909 HV] Heidelberg Okt. 17* 182, 373 Wien Okt. 23 184, 335 [1909 HW] Heidelberg Okt. 18* 182, 374 [1909 HY] Heidelberg Nov. 6* 183, 15 [1909 HY] Heidelberg Nov. 9* 183, 16 [1909 JA] Heidelberg Nov. 9* 183, 16 Taunton Nov. 7*, 9* 185, 3 Kopenhagen Nov. 15, 16, 17, 22 185, 3 Cincinnati Nov. 24 185, 3 Nov. 15, Dez. 3, 6, 13, 16, 21, 31, 1910 Jan. 28 A. N. 184, 335 [1909 JB] Taunton Nov. 7*, 9*, Dez. 18*, 20*, 21* 21*, 1910 Jan. 8* Nov. 183, 79, 336 Nov. 30, Dez. 4, 9 A. J. 26, 101 [1909 JE] Heidelberg Dez. 14*, 16* Nov. 183, 191 [1909 JF] Heidelberg Dez. 16* Nov. 183, 239 [1910 JH] Heidelberg Jan. 10*, 11*, Febr. 1*, 14* Nasa, 311, 184, 72 [1910 JK]				
[1909 HU] Heidelberg Nokt. 17* 182, 373 [1909 HV] Heidelberg Nokt. 17* 182, 373 Wien Okt. 23 184, 335 [1909 HW] Heidelberg Nokt. 18* 182, 374 [1909 HY] Heidelberg Nov. 6* 183, 15 [1909 JA] Heidelberg Nov. 9* 183, 16 [1909 JA] Heidelberg Nov. 7*, 9* 183, 16 [1909 JA] Heidelberg Nov. 15, 16, 17, 22 185, 3 [1909 JA] Kopenhagen Nov. 15, 16, 17, 22 185, 3 [1909 JB] Taunton Nov. 15, 16, 17, 22 185, 3 [1909 JB] Taunton Nov. 7*, 9*, Dez. 18*, 20*, 21*, 1910 Jan. 28 A. N. 184, 335 [1909 JB] Faris Nov. 30, Dez. 4, 9 A. J. 26, 101 [1909 JE] Heidelberg Dez. 14*, 16* N. 183, 191 [1909 JF] Heidelberg Dez. 16* N. 183, 239 [1910 JH] Heidelberg Jan. 10*, 11*, Febr. 1*, 14* N. 183, 311, 184, 72 [1910 JK] Heidelberg Nov. 15, 16, 17, 22 N. 183, 311, 184, 72 [1910 JK]				
[1909 HV] . Heidelberg .				
$ [1909 \ HW] \ . \ \ \text{Heidelberg} \ . \ \ \text{Not. } 18^{\circ} \ . \ \ \text{Nov. } 6^{\circ} \ . \ \ \text{Nov. } 182, 374 \\ [1909 \ HY] \ . \ \ \text{Heidelberg} \ . \ \ \text{Nov. } 6^{\circ} \ . \ \ \text{Nov. } 183, 15 \\ [1909 \ JA] \ . \ \ \text{Heidelberg} \ . \ \ \text{Nov. } 9^{\circ} \ . \ \ \text{Nov. } 183, 16 \\ [1909 \ JA] \ . \ \ \text{Heidelberg} \ . \ \ \text{Nov. } 9^{\circ} \ . \ \ \text{Nov. } 183, 16 \\ [1909 \ JA] \ . \ \ \text{Heidelberg} \ . \ \ \text{Nov. } 7^{\circ}, 9^{\circ} \ . \ \ \text{Nov. } 183, 79 \\ [1909 \ JA] \ . \ \ \text{Kopenhagen} \ . \ \ \text{Nov. } 183, 16, 16, 17, 22 \ . \ \ \text{Nov. } 183, 79 \\ [1909 \ JB] \ . \ \ \text{Taunton} \ . \ \ \text{Nov. } 18, 19, 19, 19, 19, 19, 19, 19, 19, 19, 19$	[1909 HV]			
$ [1909 \ HW] \ . \ [1909 \ HX] \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	[1909 111] .			
	[TOOR HHV]			
$ [1909 \ HY] \text{Heidelberg} \text{Nov. } 9^{\text{*}} \dots \text{Nov. } 9^{\text{*}} \dots \text{Nov. } 183, 16 \\ \text{Heidelberg} \text{Nov. } 7^{\text{*}}, 9^{\text{*}} \dots \text{Nov. } 183, 16 \\ \text{Taunton} \text{Nov. } 7^{\text{*}}, 9^{\text{*}} \dots \text{Nov. } 183, 79 \\ \text{Kopenhagen} \text{Nov. } 15, 16, 17, 22 \dots \text{Nov. } 185, 3 \\ \text{Cincinnati} \text{Nov. } 24 \dots \text{Nov. } 185, 3 \\ \text{Cincinnati} \text{Nov. } 15, \text{ Dez. } 3, 6, 13, 16, \\ 21, 31, 1910 \text{ Jan. } 28 \dots \\ \text{Nov. } 7^{\text{*}}, 9^{\text{*}}, \text{ Dez. } 18^{\text{*}}, 20^{\text{*}}, \\ 21^{\text{*}}, 1910 \text{ Jan. } 28 \dots \\ \text{Nov. } 3^{\text{*}}, 9^{\text{*}}, \text{ Dez. } 18^{\text{*}}, 20^{\text{*}}, \\ 21^{\text{*}}, 1910 \text{ Jan. } 8^{\text{*}} \dots \text{Nov. } 183, 79, 336 \\ \text{Cincinnati} \text{Nov. } 30, \text{ Dez. } 4, 9 \dots \text{A. N. } 183, 79, 336 \\ \text{Cincinnati} \text{Nov. } 30, \text{ Dez. } 4, 9 \dots \text{A. N. } 183, 125 \\ \text{Igo9} \ JE \right] \text{Heidelberg} \text{Okt. } 19, 23 \dots \text{A. N. } 183, 125 \\ \text{Igo9} \ JE \right] \text{Heidelberg} \text{Dez. } 14^{\text{*}}, 16^{\text{*}} \dots \text{Nov. } 183, 191 \\ \text{Igo10} \ JH \right] \text{Heidelberg} \text{Jen. } 17^{\text{*}} \dots \text{Nov. } 183, 239 \\ \text{Igo10} \ JJ \right] \text{Taunton} \text{Nov. } 30, 11^{\text{*}}, 11^{\text{*}}, 14^{\text{*}} \text{Nov. } 183, 311, \\ 184, 72 \text{Nov. } 183, 311 \\ \text{Ifeidelberg} \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 \\ \text{Nov. } 183, 311 $				
$ [1909 \ JA] . \text{Heidelberg} . \text{Nov. } 0^* $				
Taunton				
Kopenhagen Nov. 15, 16, 17, 22 Nov. 185, 3	[1909 JA] .		» Nov. 9**	
Cincinnati			» Nov. 17, 19	
Wien Nov. 15, Dez. 3, 6, 13, 16, 21, 31, 1910 Jan. 28 A. N. 184, 335				
				A. J. 20, 101
		wien . , .		A N 184 ans
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	[1000 IB]	Tounton		A. N. 104, 335
	[1909 0 12]	raunton		» » T80 50 606
		Cinainnati		
			» Dog 16*	
[1910 JJ] . Taunton . » Jan. 10*, 11*, Febr. 1*, 14* » » 183, 311, 184, 72 [1910 JK] . Heidelberg » Jan. 31* » » 183, 311				3. ,
[1910 JK] . Heidelberg » Jan. 31* » » 183, 311				
[1910 JK] . Heidelberg » Jan. 31* » » 183. 311	[1910 00] .	raumon	" Jan. 10, 11, Pem. 1, 14	
	[1910JK] .	Heidelberg	» Jan. 31*	
[1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$[1910 \ JM]$.	Heidelberg	» Febr. 2*, 9*, 13*	» » 183, 312, 427
[1910 JO] . Heidelberg » Febr. 14* » » 183, 428				
[1910 JP] . Taunton » Febr. 1*, 14* » » 184. 72		9		
[1910 JQ] . Taunton » Febr. 2*, 4*, März 3*, 8* » » 184, 72, 238				

NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (91)

_	Nr. und Name	Beobachtungsort		Datum der Beobachtung	Pı	ıblikation
	[1910 <i>JR</i>]	Taunton	1910	Febr. 4*, 5*, März 3*, 11*, April 1*, 3*	A. N.	184, 72, 238, 363
	[1910 JS]	Taunton	>>	Febr. 4*, 5*, März 8*	» »	184, 72, 238
		Taunton	>>	Febr. 7* 10*, März 4*, April		1. , , ,
				I*, IO*	» »	184, 72, 238, 363
	[1910 JU]	Taunton	>	Febr. 7*, 10*	» »	184, 72
	[1910JV]	Heidelberg	>>	Febr. 28*	» »	184, 85
		. Heidelberg	>>	März 4*, 8*	» »	184, 85, 99, 10
		Wien	>>	März 7, 9	» »	184, 87
		Rom	>>	März II, 17	» »	184, 171
	[1910JX]	. Heidelberg	>>	März 5*, 8*	» »	184, 86, 99
	[1910JY]	. Heidelberg	»	März 30*	» »	184, 176
	[1910JZ]	. Heidelberg	>>	März 9*, 14*	> >	184, 223
		Taunton	>>	März 15*	>> >>	184, 238
	[1910 KA]	. Taunton	>>	April 13*, 27*, 28*	» »	184, 303, 364
	[1910 <i>KB</i>]	. Greenwich	>>	April 27*	» »	184, 303
	$[1910 \ KC]$. Heidelberg	>>	Juni 3*	> >	185, 61
	[1910 KD]	. Heidelberg	>>	Juni 5*. 9*	» »	185, 62
	[1910 KE]	. Heidelberg	>>	Juni 5*	30 30	185, 62
	[1910 KF]	. Heidelberg	>>	Juni 5*	» »	185, 62
	[1910 KG]	. Taunton	>>	Mai 6*	» »	185, 141
	[1910 KII]	. Taunton	>>	Mai 6*	» »	185, 141
	$[1910 \ KJ]$. Taunton	>>	Mai 6*	» »	185, 141
	[1910 KK]	. Taunton	>>	Mai 6*	» »	185, 141
	[1910 <i>KL</i>]	. Taunton	>>	Mai 6*	» »	185, 141
	[1910 KM]	. Paris	>>	März 3*, 8, 10	» »	185, 211,
					B. A.	27, 270,
	[1910 KN]	. Heidelberg	>>	Juli 12*	A. N.	185, 209
	[1910 <i>KO</i>]	. Heidelberg	>>	Juli 14*	» »	185, 209
	[1910 KP]	. Heidelberg	>>	Juli 14*	» »	185, 209
	[1910 KQ]	. Heidelberg	>>	Juli 16*	» »	185, 210
		Düsseldorf	>>	Aug. 13	» »	185, 295
		Rom	>>	Aug. 27	> >	185, 407
	[1910 KS]	. Heidelberg	>>	Sept. 10 ^{tt}	» »	186, 32

B. Berechnungen.

Durch ein Sternchen (*) sind die Ephemeriden mit ausführlich gerechneten Positionen kenntlich gemacht.

37 3 37	Ort	Gegenstand
Nr. und Name	der Pı	ublikation
13 Egeria	A. N. 183, 425	Ephemeride*.
43 Ariadne	» » 185, 108	Ephemeride.
51 Nemausa	» » 185, 105 · ·	Ephemeride.
58 Concordia .	» » 185, 123	Ephemeride.
64 Angelina	B. A. 27, 176	Ephemeride.
67 Asia	A. N. 184, 158	Ephemeride.
77 Frigga	» » 185, 387	Ephemeride.
80 Sappho	» » 185, 390	Ephemeride.
91 Aegina	» » 184,87	Ephemeride.
114 Kassandra .	» » 185, 101	Ephemeride.
119 Althaea	B. A. 27, 181	Ephemeride.
124 Alkeste	A. N. 185, 101	Ephemeride.
126 Velleda	» » 185, 389	Ephemeride.
138 Tolosa	» » 185, 295	Identität mit [1909 IIL].
161 Athor	» » 185, 388	Ephemeride.
182 Elsa	» » 185, 106 · ·	Ephemeride.
188 Menippe	B. A. 27, 63	Ephemeride.
192 Nausikaa	A. N. 184, 160	Park and and de
	B. A. 27, 178	Ephemeride.
211 Isolda	A. N. 185, 106	Ephemeride.
221 Eos	» » 185, 103	Ephemeride.
229 Adelinda	A. J. 26, 54	Elemente, Ephemeride.
233 Asterope	A. N. 185, 105	Ephemeride.
287 Nephthys	» » 184, 157	Ephemeride.
303 Josephina .	» » 185, 104	Ephemeride.
306 Unitas	» » 185, 102	Ephemeride.
308 Polyxo	B. A. 27, 180	Ephemeride.
349 Dembowska .	A. N. 184, 159	Ephemeride.
372 Palma	» » 185, 107	Ephemeride.
376 Geometria .	» » 185, 104	Ephemeride.
385 Ilmatar	» » 185, 105 · ·	Ephemeride.
403 Cyane	» » 185, 103	Ephemeride.
409 Aspasia	» » 184, 159	Ephemeride.
	B. A. 27, 177 ·) ppremerior.
414 Liriope	A. N. 182, 319	Identität mit [1907 BE].
416 Vaticana	» » 184, 158	Ephemeride.
423 Diotima	» » 184, 157 · ·	Ephemeride.
431 Nephele	B. A. 27, 64	Ephemeride.

NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (93)

Nr. und Name	Ort	Gegenstand
Nr. und Name	der Pul	likation
432 Pythia	A. N. 184, 155	Ephemeride.
433 Eros	» » 184.125	Ephomeride*.
469 Argentina .	» » 183.43	Elemente.
471 Papagena .	» » 184, 156	Ephemeride.
	B. A. 27, 179	Ephemeride.
480 Hansa	A. N. 185, 102	Ephemeride.
490 Veritas	B. A. 27, 26	Ephemeride.
509 Jolanda	A. N. 185, 107	Ephemeride.
538 Friederike .	» » 185, 108	Ephemeride.
573 [1905 RC] .	B. A. 27, 222	Ephemeride.
574 [1905 RD] .	A. N. 184, 239	Elemente.
605 [1906 UU] .	B. A. 27, 221	Ephemeride.
617 Patroclus	A. N. 183, 207	Ephemeride.
654 Zelinda	» » 185, 343	Elemente, Ephemeride*.
661 [1908 CL] .	» » 183, 189	Elemente.
662 Newtonia	» » 18 2 , 331	Elemente, Ephemeride*.
663 [1908 DG] .	» » 183, 189	Elemente.
664 [1908 DH] .	» » 183, 189	Elemente.
665 [1908 DK] .	» » 183, 189	Elemente.
666 [1908 D.M] .	» » 183, 189	Elemente.
667 [1908 DN] .	» » 183, 189	Elemente.
668 [1908 <i>DO</i>] .	» » 183, 189	Elemente.
669 [1908 DQ] .	» » 183, 189	Elemente.
670 [1908 DR] .	» » 183, 189	Elemente.
671 Carnegia	» » 183, 189	Elemente.
672 [1908 DY] .	» » 183, 189	Elemente.
673 [1908 EA] .	» » 183, 189	Elemente.
674 Rachel	» » 183, 343	Elemente, Ephemeride*.
683 [1909 <i>HC</i>] .	» » 184, 319 · ·	Elemente.
686 [1909 HF] .	A. J. 26, 110	Elemente.
687 Tinette	A. N. 184, 320	Elemente.
691 Lehigh	A. J. 26, 146	Elemente.
[1901 <i>HD</i>] .	A. N. 184, 347	Elemente, Ephemeride.



Grundbegriffe der sphärischen Astronomie.

Die Bewegung der Himmelskörper wird durch die Angabe ihrer Örter und der Zeitmomente, in welchen sie diese Örter einnehmen, numerisch festgelegt.

Den Ort eines Himmelskörpers fixiert man durch seine räumlichen (rechtwinkligen oder polaren) Koordinaten. die Beobachtung indessen direkt nur die Richtung angeben kann, in der das Gestirn dem Beobachter erscheint, sind zunächst die sphärischen Koordinaten einer solchen Richtung zu definieren. Ein sphärisches Koordinatensystem, d. h. eine Orientierung auf einer Kugelfläche, wird begründet auf einen Punkt der Sphäre als Polpunkt und einen zweiten Punkt als Leitpunkt. Der Polpunkt definiert zugleich die Achse und den Aquator des Systems, die eine sphärische Koordinate ist die Poldistanz oder die sie zu 900 ergänzende Äquatordistanz. Der Leitpunkt gibt in dem durch den Polpunkt und ihn gelegten größten Kreis den Nullkreis für die Zählung der zweiten Koordinate, des Winkels zwischen dem Nullkreis und dem durch Polpunkt und Objekt gelegten größten Kreis¹). Man nennt Polpunkt und Leitpunkt oder Äquator und Nullkreis die Elemente des sphärischen Koordinatensystems. — Die gelegentlich für die Rechnung erforderlichen rechtwinkligen Koordinaten werden auf ein System bezogen, dessen z-Achse mit der Achse des sphärischen Systems zusammenfällt, während die x-Achse nach dem Nullpunkt im Äquator zeigt, und die y-Achse senkrecht dazu (im Sinne der wachsenden zweiten sphärischen Koordinate) gerichtet ist.

¹⁾ Genauer gesagt: des Winkels zwischen den beiden Halb kreisen von Nordpol zu Südpol, die den Leitpunkt, resp. das Objekt enthalten.

Die Zeit wird durch einen Bewegungsvorgang der Messung zugänglich, dessen Verlauf nach gewissen theoretischen Grundlagen genau verfolgt, und dessen jedesmalige Phase genau beobachtet werden kann; die Messung eines Zeitintervalls ist auf die Messung der zurückgelegten Strecke oder des zurückgelegten Winkels zurückgeführt. Am besten eignet sich dazu ein mit konstanter Geschwindigkeit periodisch verlaufender Bewegungsvorgang, dessen Periode die Zeiteinheit, dessen Phase den Zeitmoment gibt.

I. Definition der astronomischen Koordinaten eines Punkts der Sphäre.

Die Grundlage der gebräuchlichen sphärischen Koordinatensysteme der Astronomie bilden:

- 1. Zenit und Horizont, definiert durch die Richtung der Schwerkraft.
- 2. Himmelspol und Himmelsäquator, definiert durch die Richtung der Erdachse.
- 3. Pol der Ekliptik und Ekliptik, definiert durch die Ebene der Erdbahn.

Zenit und Himmelspol bestimmen in dem durch sie gelegten größten Kreise den Meridian des Erdorts. Äquator und Ekliptik schneiden sich in den beiden Äquinoktialpunkten, dem Frühlingspunkt, in welchem die Sonne zur Zeit des Frühlingsäquinoktiums den Äquator schneidet, und dem Herbstpunkt; den Winkel, unter dem sie sich schneiden, bezeichnet man als Schiefe der Ekliptik.

Diese drei Elemente ergeben je nach der Art ihrer Kombination folgende vier

sphärische Koordinatensysteme:

1. Das System des *Zenits* (Polpunkt) und des *Himmelspols* (Leitpunkt) oder des *Horizonts* und des *Meridians* definiert als Koordinaten:

die Zenitdistanz (z), vom Zenit zum Nadir von 0^0 bis 180^0 gezählt, oder ihre Ergänzung zu 90^0 die Höhe (h);

das Azimut (a), vom Südpunkt des Horizonts über Westen von \circ^0 bis $36\circ^0$ gezählt.

2. Das System des *Himmelspols* (Polpunkt) und des *Zenits* (Leitpunkt) oder des *Himmelsäquators* und des *Meridians* definiert als Koordinaten:

die *Poldistanz*, vom einen Pol zum andern von o⁰ bis 180⁰ gezählt¹) oder ihr Komplement, die *Deklination* (ô), vom Äquator nach Norden positiv, nach Süden negativ, von o⁰ bis 90⁰ gezählt;

den Stundenwinkel (t), vom Schnittpunkt des Äquators und des Meridians im Sinne der scheinbaren täglichen Bewegung der Gestirne von o⁰ bis 360⁰ oder o^h bis 24^h gezählt.

3. Das System des *Himmelspols* (Polpunkt) und des *Frühlings*punkts (Leitpunkt) oder des *Āquators* und der *Ekliptik*²) definiert als *äquatoriale* Koordinaten:

die *Poldistanz* oder ihr Komplement, die *Deklination* (s. unter 2);

die Rektaszension (AR. oder a), vom Frühlingspunkt entgegen der Richtung der scheinbaren täglichen Bewegung von \circ^0 bis $36\circ^0$ oder \circ^h bis 24^h gezählt.

4. Das System des *Pols der Ekliptik* (Polpunkt) und des *Frühlingspunkts* (Leitpunkt) oder der *Ekliptik* und des *Āquators*²) definiert als *ekliptikale* Koordinaten:

die Breite³) (β), entsprechend è gezählt;

die Länge (1), entsprechend a gezählt.

Das fundamentale Koordinatensystem der praktischen Astronomie ist das dritte System, das der äquatorialen Koordinaten, Rektaszension und Deklination, beruhend auf der Richtung der Erdachse und der Lage der Ekliptik. Die räumlichen Verlagerungen, welche diese beiden Elemente erleiden, machen es erforderlich, die beobachteten, auf die augenblickliche Lage des Koordinatensystems bezogenen äquatorialen Koordinaten eines Gestirns auf feste Grundelemente zu transformieren, wenn aus den Änderungen der Koordinaten auf die tatsächliche Ortsveränderung des Gestirns geschlossen werden soll.

üblich.

¹⁾ Unter Poldistanz ist stets die Nordpoldistanz verstanden.

²) Der größte (Halb-)Kreis durch Pol des Himmels und Pol der Ekliptik besitzt in dem einen System die Rektaszension 2700, in dem andern die Länge 90°.

³⁾ Im ekliptikalen System ist ein besonderer Name für den Polabstand nicht

Die Ekliptik.

Der Erdmittelpunkt bewegt sich nicht genau in einer Ebene, sondern wird durch die Anziehung der Planeten und des Mondes aus seiner Bahn, die bei alleinigem Wirken der Sonne eine ebene sein würde, abgelenkt. Bei der Geringfügigkeit dieser Einflüsse spricht man auch fernerhin von der Ebene der Erdbahn, die nun aber im Raume nicht völlig fest ist, sondern Verlagerungen teils säkularer, teils periodischer Natur erleidet. Die periodischen Glieder sondert man aus diesen Schwankungen ab und versteht, sobald man die Ekliptik als Fundamentalebene des astronomischen Koordinatensystems, d. h. zur Definition des Frühlingspunkts, einführt, nunmehr unter Ekliptik die von den periodischen Schwankungen befreite, d. h. nur säkular bewegte mittlere Ebene der Erdbahn. Die periodischen Schwankungen der wahren Erdbahn äußern sich dann darin, daß die Sonne nicht stets genau in dieser mittleren Ekliptik steht, sondern eine kleine Breite bis ± 1" annehmen kann.

Die Lage der momentanen mittleren Ekliptik gegen die mittlere Ekliptik einer festen Normalepoche, die sogenannte feste Ekliptik, wird fixiert durch Neigung i und Knotenlänge Ω , letztere gerechnet vom (mittleren) Frühlingspunkte der Normalepoche in der festen Ekliptik. Die numerischen Beträge liefert die Theorie der säkularen Störungen der Planetenbahnen. Nach Newcomb hat man, wenn T in Jahrhunderten von 1850 gezählt wird:

$$i = 47''.14 T - 0''.03 T^2$$

 $\Omega = 173^0 29'.68 - 14'.48 T.$

Die Erdachse.

Die Rotationsachse der Erde führt im Raume, und damit der Himmelspol auf der Sphäre, die Präzessions- und Nutationsbewegung aus. Mit dem Namen *Präzession* bezeichnet man die langperiodische Umlaufsbewegung des Himmelspols um den Pol der Ekliptik, mit dem Namen *Nutation* die kurzperiodischen Schwankungen um diese Mittellage. Die dadurch in der Lage des Himmelsäquators hervorgerufenen Schwankungen beeinflussen auch Frühlingspunkt und Schiefe der Ekliptik. Die augenblickliche Lage dieser Elemente (Pol, Äquator, Frühlings-

punkt) bezeichnet man als ihre wahre Lage¹). Im Gegensatz dazu nennt man mittleren Pol und mittleren Äquator die allein durch die Präzession beeinflußte Lage von Pol und Äquator, mittleren Frühlingspunkt den Schnittpunkt dieses mittleren Äquators und der mittleren Ekliptik, mittlere Schiefe der Ekliptik den Winkel zwischen mittlerem Äquator und mittlerer Ekliptik.

Den Verlauf dieser Bewegungen liefert die Theorie der Erdrotation in Verbindung mit den oben gegebenen Verlagerungen der Erdbahn.

Präzession.

Den Verlauf der Präzessionsbewegung von der festen Epoche 1850 bis zur veränderlichen 1850 + T (T in Jahrhunderten) fixieren folgende Angaben (die Zahlenwerte nach Newcomb):

1. Die "Allgemeine Präzession" in Länge, d. h. die Bewegung des Durchschnittspunkts des beweglichen Äquators und der beweglichen Ekliptik, gezählt auf der letzteren:

$$\psi_1 = 5024$$
".53 $T + 1$ ".11 T^2 .

Den Koeffizienten von T in ψ_1 nennt man die $Pr\ddot{a}$ -zessionskonstante.

2. Die Lunisolarpräzession in Länge, das ist die Bewegung des Durchschnittspunkts des beweglichen (mittleren) Äquators und der festen Ekliptik (1850), gezählt auf der letzteren:

$$\psi = 5036".84 T - 1".07 T^2.$$

3. Die Präzession durch die Planeten, das ist der Bogen auf dem mittleren Äquator der Zeit 1850 + T zwischen der Ekliptik von 1850 und der von 1850 + T:

$$a = 13$$
".42 $T - 2$ ".38 T^2 .

4. Der Winkel zwischen fester Ekliptik (1850) und beweglichem Äquator (1850 + T):

$$\varepsilon_0 = 23^0 \, 27' \, 31''.68 + 0''.07 \, T^2 - 0''.01 \, T^3.$$

5. Die mittlere Schiefe der Ekliptik zur Zeit 1850 + T:

$$\varepsilon = 23^{\circ} 27' 31''.68 - 46''.84 T - 0''.01 T^{2}$$

¹⁾ Nur ist, genauer ausgedrückt, der wahre Frühlingspunkt der Schnittpunkt des wahren Äquators mit der oben definierten mittleren Ekliptik, die wahre Schiefe der Winkel zwischen wahrem Äquator und mittlerer Ekliptik.

6. Die "Allgemeine Präzession" in Rektaszension, das ist die Bewegung des Durchschnittspunkts der beweglichen Ekliptik und des beweglichen Äquators, gezählt auf dem letzteren:

$$z + \zeta = 4607$$
".11 $T + 1$ ".40 $T^2 + 0$ ".04 T^3 .

7. Der Winkel zwischen dem mittleren Äquator von 1850 und dem von 1850 + T:

$$\vartheta =$$
 2005".11 $T-$ 0".43 T^2- 0".04 T^3 .

Nutation.

1. Nutation in Länge:

$$\begin{split} \Delta \psi &= -(17''.234 + \circ''.017\,T)\sin\Omega + \circ''.209\sin2\Omega \\ &- 1''.272\sin2L + \circ''.126\sin g' \\ &- \circ''.050\sin(2\,L + g') + \circ''.021\sin(2\,L - g') \\ &+ \circ''.012\sin(2\,L - \Omega) + \circ''.005\sin(2\,\omega + \Omega) \\ &- \circ''.204\sin2\% + \circ''.068\sin g - \circ''.034\sin(2\% - \Omega) \\ &- \circ''.026\sin(2\% + g) + \circ''.015\sin(2\% - 2\,L - g) \\ &+ \circ''.011\sin(2\% - g) + \circ''.006\sin(2\% - 2\,L). \end{split}$$

2. Nutation in Schiefe:

$$\begin{array}{l} \Delta\varepsilon = (9".210 + 0".0009\ T)\cos\Omega - 0".090\cos2\ \Omega \\ + 0".551\cos2\ L + 0".022\cos(2\ L + g') - 0".009\cos(2\ L - g') \\ - 0".007\cos(2\ L - \Omega) - 0".003\cos(2\ \omega + \Omega) \\ + 0".088\cos2\ (+ 0".018\cos(2\ (-\Omega) + 0".011\cos(2\ (-g)) \\ - 0".005\cos(2\ (-g)). \end{array}$$

Den Koeffizienten des Hauptgliedes der Nutation in Schiefe nennt man die *Nutationskonstante*.

Darin ist nach Hansen resp. Newcomb:

$$\begin{array}{lll} \Omega = 259^0 \text{ 1o' } 50^{\circ}.37 - & 6962923^{\circ}.21 \ T + & 8^{\circ}.21 \ T^2 + 0^{\circ}.01 \ T^3 \\ \omega = & 75^0 & 8^{\circ}.47^{\circ}.92 + & 21611433^{\circ}.29 \ T - 44^{\circ}.45 \ T^2 - 0^{\circ}.04 \ T^3 \\ g = & 296^0 & 7^{\circ}.6^{\circ}.30 + 1717915936^{\circ}.17 \ T + 49^{\circ}.59 \ T^2 + 0^{\circ}.05 \ T^3 \\ \mathbb{C} = \Omega + \omega + g. \end{array}$$

$$g'=358^{0}$$
 28' 33".0 + 129596579".10 $T-$ 0".54 T^{2} $L=279^{0}$ 41' 48".04 + 129602768".13 $T+$ 1".09 T^{2}

§ Mondknoten, ω Distanz des Mondperigäums vom Mondknoten, g und g' mittlere Anomalie des Mondes und der Sonne, (und L mittlere Länge des Mondes und der Sonne; T die seit 1900 Jan. 0.0 M. Zt. Greenwich verflossene Zeit in julianischen Jahrhunderten (= 36525 mittl. Sonnentagen).

Wahre und Mittlere Koordinaten.

Infolge der Verlagerungen der Ekliptik und der Erdachse im Raume hängen die Koordinaten eines Punkts der Sphäre davon ab, auf welchen Zustand des Koordinatensystems, kurz, auf welches Äquinoktium sie bezogen sind. Die Beobachtungsmethoden verwerten die Rotation der Erde bei der Messung der Koordinaten und geben sie demnach (oder genauer ihre Differenzen) bezogen auf den momentanen Zustand des Koordinatensystems, d. h. auf den momentanen Äquator¹). Indem man gleichzeitig die AR.-en auf den wahren Frühlingspunkt in ihm bezieht, erhält man die Koordinaten, bezogen auf das wahre Aquinoktium der Beobachtungsepoche. Befreit man sie von dem Einfluß der Nutation, so beziehen sie sich auf die momentane Lage des mittleren Äquators und der mittleren Ekliptik, kurz auf das mittlere Aquinoktium der Beobachtungsepoche. Von hier aus kann man sie auf das mittlere Aquinoktium des Jahresanfangs oder auf das einer Normalepoche, ein Normal-Aquinoktium, beziehen.

Anmerkung: Eine ganz feststehende Bezeichnung für die soleher Art unterschiedenen Koordinaten besteht nicht, man spricht zwar von »wahren« Koordinaten des betreffenden Punkts der Sphäre im Gegensatz zu »mittleren«; doch ist nicht zu übersehen, daß die Bezeichnung »wahr« mehr in Beziehung zu dem Ort eines Gestirns im Gegensatz zu seinem »scheinbaren« Ort gebraucht wird.

Zur Übertragung der Gestirnskoordinaten von dem mittl. Äquin. 1850 + $\tau = t_1$ auf das mittl. Äquin. 1850 + $\tau + T = t_2$ (τ und T in Jahrhunderten) dienen die Hilfsgrößen:

$$\zeta = (2303''.56 + 1''.40\tau) T + 0''.30 T^2 + 0''.02 T^3$$

$$z = (2303''.55 + 1''.40\tau) T + 1''.09 T^2 + 0''.02 T^3$$

$$\vartheta = (2005''.11 - 0''.85\tau) T - 0''.43 T^2 - 0''.04 T^3$$

¹⁾ Wenigstens bei den üblichen Beobachtungsmethoden mit festem Fernrohr; die Ausmessung photographischer Aufnahmen — und strenge genommen auch des visuellen Himmelsbildes bei bewegtem Fernrohr — kann, wenn nur die Örter der Fixpunkte, resp. die Richtungen der Mikrometerfäden entsprechend gewählt werden, in einem beliebigen festen Koordinatensysteme erfolgen.

Die Bedeutung der Hilfsgrößen 4 und z ist:

 $-\zeta$: die AR. des Himmelspols zur Zeit t_2 , gezählt vom Äquinoktium t_1 .

1800 + z: die AR. des Himmelspols zur Zeit t_1 , gezählt vom Äquinoktium t_2 .

Bezeichnen dann α_1 , δ_1 resp. α_2 , δ_2 die Koordinaten eines Gestirns, bezogen auf das mittlere Äquin. t_1 resp. t_2 , so ist:

$$a_1 = \alpha_1 + \zeta$$

$$p = (\operatorname{tg} \delta_1 + \cos a_1 \operatorname{tg} \frac{1}{2} \vartheta) \sin \vartheta$$

$$\operatorname{tg} \Delta a = \frac{p \sin a_1}{1 - p \cos a_1}$$

$$\alpha_2 = a_1 + z + \Delta a$$

$$\operatorname{tg} \frac{1}{2} (\delta_2 - \delta_1) = \cos (a_1 + \frac{1}{2} \Delta a) \sec \frac{1}{2} \Delta a \operatorname{tg} \frac{1}{2} \vartheta,$$

oder, fast immer ausreichend genau:

$$\delta_2 = \delta_1 + \vartheta \cos \left(a_1 + \frac{1}{2} \Delta a \right) \sec \frac{1}{2} \Delta a^{-1}$$

Diese strengen Übertragungsformeln werden nur angewandt, wenn es sich um polnahe Sterne oder um sehr große Zwischenzeiten t_2-t_1 handelt. In allen anderen Fällen entwickelt man den Präzessions-Effekt nach Potenzen der Zwischenzeit t_2-t_1 , welche man in Jahren auszudrücken pflegt, und setzt:

$$|Prz|_{t_1}^{t_2} = Prz_{t_1}(t_2 - t_1) + \frac{1}{200}V_{t_1}(t_2 - t_1)^2 + \dots$$

Darin stellen dar:

 Prz_t die momentane Änderung der Koordinaten durch die Präzession zur Zeit t, berechnet für ein Jahr; man bezeichnet sie als jährliche Präzession oder kurz Präzession:

$$Prz_t(\alpha) = m + n \sin \alpha \operatorname{tg} \delta$$

 $Prz_t(\delta) = n \cos \alpha$

mit:

$$m = \frac{d(z+\zeta)}{dt} = \frac{d\psi}{dt}\cos \varepsilon - \frac{da}{dt} = 46".0711 + 0".000279(t-1850)$$

$$n = \frac{d\psi}{dt} = \frac{d\psi}{dt}\sin \varepsilon = 20".0511 - 0".000086(t-1850).$$

 V_t die hundertjährige Änderung von Prz_t ; man bezeichnet sie als variatio saecularis (v. s.).

⁾ Will man umgekehrt α_1 , δ_1 aus α_2 , δ_2 ableiten, so hat man statt der Hilfsgrößen: ζ , z, ϑ nunmehr: -z, $-\zeta$, $-\vartheta$ anzuwenden.

 Prz_t und V_t fügt man gewöhnlich den Angaben der Sternörter in den Sternkatalogen bei. Ist das nicht der Fall, so genügt die Berechnung von Prz für das Mittel beider Epochen, um durch

$$|Prz|_{t_1}^{t_2} = Prz_{\frac{t_1+t_2}{2}}(t_2-t_1)$$

die gleiche Genauigkeit zu erzielen.

II. Messung der Zeit.

Der Tag.

Zum Messen der Zeit bedient man sich des periodischen Vorgangs der Erdrotation, welche mit konstanter Winkelgeschwindigkeit um die Erdachse erfolgt. Zur Zeiteinheit wählt man die Dauer einer solchen Rotation, den Tag, und bestimmt den Zeitmoment durch die augenblickliche Phase dieser Rotation. Da diese Phase indessen nur durch die Stellung der Ebene eines bestimmten Erdmeridians gegen die Außenwelt, d. h. gegen bestimmte Marken an der Sphäre, fixiert werden kann, und alle Himmelsobjekte ihren Ort an der Sphäre mehr oder weniger verändern, so hängt die Länge der Zeiteinheit von dem gewählten Objekt ab. Da ferner die Ebene eines Erdmeridians infolge der veränderlichen Lage der Erdachse im Raume nach Verlauf einer Umdrehung nicht mehr die gleiche Lage zur Sphäre einnimmt, und sonach auch dieserhalb die Dauer einer Umdrehung von der Lage des zur Marke dienenden Gestirns, selbst wenn es fest wäre, abhängt, so setzt die absolute Konstanz des Zeitmaßes eine gleichförmige Bewegung der die Zeit bestimmenden Himmelsmarke¹) in dem wahren Äquator voraus.

Als Zeitmarken kommen allein der Frühlingspunkt, als Nullpunkt der AR.-en von wesentlichster Bedeutung für die Astronomie, und die Sonne, ihrer Bedeutung für das bürgerliche Leben wegen, in Betracht. Die beiden auf sie begründeten Zeitmessungen bezeichnet man als Sternzeit- und als Sonnenzeit-Rechnung. Indem man noch den Anfangspunkt der Zählung,

¹⁾ oder eigentlich nur ihrer sphärischen Projektion auf den wahren Äquator.

das ist den Beginn des Tages, auf den Moment der Kulmination legt, definiert man im besonderen als

Sternzeit: den Stundenwinkel des (wahren) Frühlingspunkts. Sonnenzeit: den Stundenwinkel der Sonne.

Sterntag resp. Sonnentag: die Zeit, die zwischen zwei aufeinanderfolgenden Durchgängen des Frühlingspunkts resp. der Sonne durch den Meridian verfließt.

Allgemein gilt dann für jedes Gestirn:

Sternzeit (θ) = Stundenwinkel (t) + Rektaszension (α) .

Da aber die Bewegung der Sonne in AR. ungleichförmig ist, führt man statt der wahren Sonne eine mit gleichförmiger Geschwindigkeit im wahren Äquator wandernde fingierte, eine sogenannte mittlere Sonne ein und definiert dann als:

Wahre (Sonnen)-Zeit den Stundenwinkel der wahren Sonne.

Mittlere (Sonnen)-Zeit den Stundenwinkel der mittleren Sonne.

Wahren Mittag den Kulminationsmoment der wahren Sonne. Mittleren Mittag den Kulminationsmoment der mittleren Sonne.

Ebenso bezeichnet man die Zeit, die zwischen zwei aufeinanderfolgenden Durchgängen dieser mittleren Sonne durch den Meridian verfließt, als *mittleren Sonnentag*.

Den Unterschied beider Sonnenzeiten nennt man die Zeitgleichung. Es ist:

Zeitgleichung = Mittlere Zeit - Wahre Zeit.

Da aber

Sternzeit = Wahre Zeit + AR. der wahren Sonne = Mittlere Zeit + AR. der mittleren Sonne ist, so folgt:

Zeitgleichung = AR. der wahren Sonne minus AR. der mittleren Sonne.

Die mittlere Zeit ist ein gleichförmiges Maß der Zeit.

Die Sternzeit stellt kein völlig gleichförmiges Zeitmaß dar, da der wahre Frühlingspunkt infolge der Nutationsschwankungen im Aquator nicht gleichförmig bewegt ist. Indessen sind seine Schwankungen um den mittleren Frühlingspunkt nur geringfügig, so daß man bei der Rechnung nach wahrer Sternzeit stehen bleibt. Diese Messung der Zeit durch die wahre Sternzeit weicht also von einer absolut gleichförmigen Zeitmessung, wie sie durch eine ideale

Uhr angezeigt würde, um den Betrag der Nutation des Frühlingspunkts in AR. ab; die Hauptglieder verursachen eine Schwankung um eine absolut gleichförmige Zeitmessung von \pm 18.05 in 182/3-jähriger und von \pm 08.08 in 1/2-jähriger Periode.

Auch der allein der Präzession unterworfene mittlere Frühlingspunkt ist infolge des quadratischen Gliedes der Präzession nicht ganz gleichförmig bewegt, doch ist die Ungleichförmigkeit auf absehbare Zeit hin zu vernachlässigen 1).

Zur Umrechnung von Sternzeit in mittlere Zeit und umgekehrt bedarf man des Verhältnisses der beiden Zeiteinheiten und der Beziehung der Zählungsanfangspunkte aufeinander. Für das erstere gilt:

ı (mittlerer) Sterntag 2) = 0.997269567 mittlere Sonnentage = $23^{\rm h}56^{\rm m}4^{\rm s}$.09058 in mittlerem Zeitmaß.

1 mittlerer Sonnentag = 1.002737909 (mittlere) Sterntage = $24^{h}3^{m}56^{s}.55536$ in Sternzeitmaß.

Um die Beziehung beider Zählungsanfangspunkte aufeinander zu erhalten, gibt man an

Sternzeit im mittleren Mittag = A_m + Nut. in AR. = $18^{\text{h}} 38^{\text{m}} 45^{\text{s}}.836 + 8640184^{\text{s}}.542 T + 0^{\text{s}}.0929 T^2 + \text{Nut. in AR.}$ (nach Newcomb),

worin T die seit 1900 Jan. 0.0 M. Zt. Greenwich verflossene Zeit in Einheiten von 36525 mittleren Sonnentagen bezeichnet.

Die genannten Zeiten sind infolge ihrer Definition als Stundenwinkel eines Himmelsobjekts Ortszeiten; da die Differenz der Zeiten zweier Orte (im gleichen Moment) gleich der geographischen Längendifferenz beider Orte ist, setzt eine Beziehung zweier an verschiedenen Erdorten erhaltenen Zeitangaben die Kenntnis ihrer Längendifferenz voraus.

Um der Unbequemlichkeit des beständigen Wechsels der Zeit von Ort zu Ort zu entgehen, hat man neuerdings im bürgerlichen Leben gewisse Normalzeiten eingeführt, die für

¹⁾ Streng genommen wird jede Zeitmessung auch durch die Veränderlichkeit der Erdmeridiane infolge der Verlagerung der Erdachse und damit des Erdpols im Erdkörper beeinflußt; doch ist deren Effekt weit unter der Grenze der Meßbarkeit.

²⁾ d. h. abzüglich der Nutationsschwankungen oder die Durchschmittslänge eines wahren Sterntages.

eine ganze Zone (in geographischer Länge) gleich bleiben; sie sind fast durchweg an den Greenwicher Meridian angeschlossen und weichen um eine bestimmte Anzahl ganzer Stunden von Greenwicher Zeit ab, so die Greenwicher Zeit selbst, die Mitteleuropäische Zeit (Greenwicher Zeit $+\mathbf{1}^{\mathrm{h}}$), usw.

Der Beginn des bürgerlichen Tages wird auf Mitternacht gelegt, sodaß die ersten zwölf Stunden des astronomischen Tages mit den Nachmittagsstunden desselben bürgerlichen Tages, die zweiten zwölf Stunden mit den Vormittagsstunden des nächstfolgenden bürgerlichen Tages identisch sind.

Das Jahr.

Die durchlaufende Zählung nach Tagen bietet bei größeren Zeiträumen Unbequemlichkeiten, zu deren Vermeidung man als Zeiteinheit an die Stelle des Tages das Jahr einführt.

1. Das tropische Jahr ist die Zeit, in welcher die mittlere Länge der wahren Sonne (ohne periodische Störungen) um 3600 zunimmt. Seine Länge ist =

[365.24219879 — 0.000000614(t-1900)] mittleren Tagen, es ist also nicht absolut konstant, doch nimmt seine Länge in einem Jahrtausend nur um $5^{s}.3$ ab.

Nach Bessel legt man den Beginn des astronomischen Jahres auf den Moment, in welchem

$$A_m = 2800 = 18^{\rm h}40^{\rm m}$$

ist, was nahe mit dem bürgerlichen Jahresanfang zusammenfällt, nennt diesen Moment den Beginn des *annus fictus* und sagt z.B. 1900.0; die Länge dieses so definierten annus fictus ist =

[365.24219879 — 0.0000000786 (t—1900)] mittleren Tagen und fällt demnach sehr nahe mit der des tropischen Jahres zusammen. Der Moment, in welchem das annus fictus beginnt, ist ein von jeder Beziehung zu einem Erdmeridian unabhängiger, absoluter Weltzeitmoment. Um ihn zu den einzelnen Ortszeiten in Beziehung zu setzen, benutzt man den Meridian, in welchem die mittlere Sonne im Beginn des annus fictus kulminiert, den sog. Normalmeridian, dessen östliche geographische Länge von Jahr zu Jahr um nahezu 90° abnimmt. Die Beziehung des bürgerlichen Jahresanfangs

zu dem des annus fictus vermittelt dann der sog. dies reductus, d. h. die Differenz "bürgerlicher Jahresanfang — Anfang des annus fictus".

- 2. Das julianische Jahr = $365^{1}/_{4}$ mittleren Sonnentagen.
- 3. Das gregorianische oder bürgerliche Jahr = 365.2425 mittleren Sonnentagen (1582 eingeführt, indem nach dem 4. Oktober 10 Tage ausgelassen und gleich der 15. Oktober gezählt wurde).

Die astronomische Praxis setzt den Beginn des Gemeinjahres auf Jan. o ohomos mittlerer Ortszeit,

den Beginn des Schaltjahres auf

Jan. 1 oh om os mittlerer Ortszeit.

Den Ausgangspunkt der Zeitrechnung nach Jahren bildet das Jahr o, identisch mit dem Jahre I v. Chr. der Chronologie; allgemein ist das Jahr -n gleich dem Jahre n+1 v. Chr., so daß von Anfang des Jahres -n bis zum Anfang des Jahres +m genau m+n Jahre verflossen sind.

Die durchlaufende Rechnung nach mittleren Sonnentagen setzt den Beginn der sogenannten julianischen Periode auf Januar 1.0 des Jahres — 4712; von da an sind die Jahre bis 1581 einschließlich als julianische gezählt, das Jahr 1582 erhält 365—10 = 355 Tage, dann wird nach den Vorschriften des gregorianischen Kalenders gerechnet.

III. Reduktion der beobachteten Koordinaten eines Gestirnsortes.

Scheinbarer Ort und Wahrer Ort.

Der Ort, an dem uns ein Gestirn erscheint, und sonach die Richtung, in der wir das Gestirn am Fernrohr einstellen, entspricht nicht der geradlinigen Verbindungslinie des Beobachtungsund des Gestirnsortes, sondern weicht infolge der endlichen Fortpflanzungsgeschwindigkeit des Lichts um den Betrag der sogenannten Aberration davon ab. Aus dem gleichen Grunde ist der Moment t_2 , in dem wir das Gestirn beobachten, von dem Moment t_1 , zu dem es das Licht aussandte, um die sogenannte Lichtzeit ($\Delta t = 498^{\rm s}.4 \Delta$, Δ in Einheiten der mittleren Entfernung Erde—Sonne) verschieden.

Die Aberration.

Die Aberration bewirkt eine Verschiebung des Gestirnsorts in der Richtung nach dem Zielpunkt oder Apex der momentanen Bewegung des Beobachters um den Betrag $\frac{v}{V}$ sin D, wenn v und V die Geschwindigkeit des Beobachters und des Lichts, D den Winkelabstand des Gestirns von jenem Apex bezeichnen. Den so verschobenen, allein beobachtbaren Ort des Gestirns nennt man seinen scheinbaren Ort, den von dem Aberrationseffekt befreiten seinen wahren Ort. In aller Strenge müßte man den Aberrationseffekt mit der momentanen Bewegungs-Richtung und -Geschwindigkeit des Beobachters berechnen, in der Praxis zerlegt man ihn aber mit hinreichender Schärfe, den beiden Hauptbewegungsformen des Beobachters entsprechend, in die tägliche (der Erdrotation entstammende) und die jährliche (dem elliptischen Erdumlauf um die Sonne entstammende) Aberration.

Bezeichnet man die scheinbaren Koordinaten durch hinzugefügte Striche, so erhält man als Reduktionsformeln für

Tägliche Aberration:

$$\alpha - \alpha' = -0$$
".320 $\cos \varphi \cos t \sec \delta$
 $\delta - \delta' = -0$ ".320 $\cos \varphi \sin t \sin \delta$.

Bei differentiellen Messungen fällt sie heraus, bei Meridianbeobachtungen ($t=\circ$) wirkt sie nur auf α und läßt sich stets in Verbindung mit dem Kollimationsfehler des Instruments berücksichtigen.

Jährliche Aberration.

Es genügt auch hier fast stets, sich auf die Glieder erster Ordnung zu beschränken. In ekliptikalen Koordinaten wird:

$$\begin{array}{l} \lambda - \lambda' = 20".47\cos\left(\odot - \lambda\right)\sec\beta + \{\circ".343\cos\left(l' - \lambda\right)\sec\beta\} \\ \beta - \beta' = 20".47\sin\left(\odot - \lambda\right)\sin\beta + \{\circ".343\sin\left(l' - \lambda\right)\sin\beta\}. \end{array}$$

Hierin ist \odot die wahre Länge, Γ die Länge des Perigäums (= L-g') der Sonne. Den Koeffizienten des Hauptgliedes nennt man die Aberrationskonstante. Das in Klammern gesetzte, von der Erdbahnexzentrizität abhängige Glied bewirkt¹) für

¹⁾ Wenigstens soweit man von den Veränderungen der Erdbahn selbst absieht.

die Fixsterne eine konstante Verschiebung des Orts an der Sphäre; auch sein Betrag in a und in 8 kann außer bei ganz polnahen Sternen als konstant angesehen werden; seine Berücksichtigung erübrigt sich daher hier. Damit wird dann in äquatorialen Koordinaten:

 $\alpha - \alpha' = 20^{\circ}.47 \ (\sin \alpha \sin \odot + \cos \alpha \cos \odot \cos \epsilon) \sec \delta$ $\delta - \delta' = 20^{\circ}.47 \ (\cos \alpha \sin \odot \sin \delta - (\sin \alpha \sin \delta \cos \epsilon - \cos \delta \sin \epsilon) \cos \odot).$

Die Abweichung der tatsächlichen Erdbewegung von einer den Keplerschen Gesetzen folgenden elliptischen Bewegung um den Sonnenmittelpunkt, herrührend von den störenden Einflüssen der Planeten und des Mondes auf Sonne und Erde, verursacht nur geringfügige Aberrationseffekte (vergl. H. Battermann, Beiträge zur astronomischen Aberrationslehre, Diss., Berlin 1881), die unberücksichtigt bleiben können.

Der von der Aberration befreite wahre Ort stellt die Richtung vom Erdort E2 nach dem Gestirnsort S1 dar und könnte bei Kenntnis der Entfernung des Gestirns und damit der Lichtzeit durch Berücksichtigung des parallaktischen Effekts der Erdbewegung von E_1 nach E_2 (kurz der Lichtzeitparallaxe) auf den gemeinsamen Moment t1 bezogen, d. h. auf die Richtung von E₁ nach S₁ reduziert werden. In der Praxis verwertet man indessen die Tatsache, daß für alle Körper des Sonnensystems die Bewegung des Erdmittelpunkts während der Lichtzeit als geradlinig gelten kann und sonach der zur Zeit t, beobachtete scheinbare Gestirnsort gleich dem der Zeit t1 zugehörigen wahren ist, und befreit die unmittelbare Beobachtung von Aberration und Lichtzeitparallaxe zusammen, indem man — neben der eventuellen Berücksichtigung der täglichen Aberration — nur die Beobachtungszeit t_2 um Δt vermindert. Der Fehler beträgt im Maximum etwa o".oo14 und erreicht damit selbst für Neptun höchstens o".o3. Damit ist dann auch für die Wandelsterne das kleine von der Erdbahnexzentrizität abhängige Glied berücksichtigt. Ist die Entfernung unbekannt, so bringt man an den beobachteten scheinbaren Ort allein die Aberration an und hat dann die wahre Richtung von E2 nach S1; um dann bei neuentdeckten Planeten oder Kometen wahre heliozentrische Örter für die Zeit tı zu gewinnen, führt man in die Übertragungsformeln der geozentrischen Örter des Gestirns in heliozentrische die Erdkoordinaten der Epoche t_2 ein; die Zeitmomente t_1 selbst lernt man allerdings erst kennen, wenn durch die Bahnbestimmung die Entfernung Δ bekannt wird. Für die Fixsterne, deren Entfernung ja fast durchweg unbekannt ist, sieht man von der Berücksichtigung der Lichtzeitparallaxe ganz ab, wodurch nur ein für die Praxis gleichgültiger konstanter Fehler in dem Sternort entsteht.

Parallaxe.

Die beobachteten Örter beziehen sich auf den jedesmaligen Standpunkt des Beobachters als Koordinatennullpunkt, sie werden daher praktisch noch auf einen von der individuellen Ortsveränderung des Beobachters unabhängigen Nullpunkt übergeführt, als den man im allgemeinen den Erd- oder den Sonnenmittelpunkt wählt. Diese Übertragung der beobachteten in geozentrische oder heliozentrische Örter erfolgt durch Berücksichtigung der sogenannten täglichen oder jährlichen Parallaxe, indem man die Veränderung, welche die Richtung nach einem Objekte beim Übergang von einem Beobachtungsstandpunkt zu einem anderen erleidet, als parallaktische und ihren Betrag allgemein als Parallaxe bezeichnet. Wird der Betrag einer solchen Verschiebung des Koordinatensystems in rechtwinkligen Koordinaten durch die drei Strecken x, y, z fixiert, so ist in leicht ersichtlicher Schreibweise:

 $\Delta \cos A \cos B = \Delta' \cos A' \cos B' + x$ $\Delta \sin A \cos B = \Delta' \sin A' \cos B' + y$ $\Delta \sin B = \Delta' \sin B' + z$,

woraus man weitere Formeln für A'-A, B'-B, $\Delta'-\Delta$ ableiten kann. Zu ihrer Auswertung muß man die Beträge x, y, z und die Entfernung des Objekts kennen.

Geozentrischer Ort.

Beim Übergang auf das Erdzentrum wird in äquatorialen Koordinaten

 $x = \rho \cos \Theta \cos \varphi'$, $y = \rho \sin \Theta \cos \varphi'$, $z = \rho \sin \varphi'$, worin ρ , φ' , Θ die geozentrischen Polarkoordinaten des Beobachtungsorts im äquatorialen Koordinatensystem, d. h. ρ , φ' geozentrischen Radiusvektor und geozentrische Breite, Θ die Sternzeit bezeichnen. Sind a, b die Halbachsen der Erd-

meridianellipse, $\mathfrak{a} = \frac{a-b}{a}$ die sogenannte Abplattung der Erde, φ die geographische Breite des Beobachtungsorts, so wird:

$$\operatorname{tg} \phi' = \frac{\hbar^2}{a^2} \operatorname{tg} \phi \ \operatorname{und} \ \rho^2 = a^2 \, \frac{\cos \phi}{\cos \phi' \cos (\phi' - \phi)} \cdot$$

Die Erddimensionen sind nach

		a	b	ι: α
Bessel .		6377397	6356079	299.15
Clarke .		6 378 249	6356515	293.47
Helmert		6378000	6356612	298.20

Für den Mond muß man die strengen Transformationsformeln oder Reihenentwicklungen verwenden, für alle übrigen Gestirne reicht das erste Glied dieser Entwicklung aus:

$$\begin{split} a_{\text{geoz.}} - a_{\text{beob.}} &= \frac{\rho \, p_{\odot}}{\Delta} \, \cos \phi' \sec \delta \sin \left(\Theta - \alpha\right) \\ \delta_{\text{geoz.}} - \delta_{\text{beob.}} &= \frac{\rho \, p_{\odot}}{\Delta} \, [\cos \delta \sin \phi' - \sin \delta \cos \phi' \cos \left(\Theta - \alpha\right)]. \\ \rho &\text{in Einheiten des Aquatorradius } a \, \text{der Erde.} \end{split}$$

Δ in Einheiten der mittleren Entfernung Erde-Sonne.

 $p_{\odot}=8$ ".80 ist die Sonnenparallaxe, d. i. der Winkel, unter welchem der Äquatorradius a der Erde von der Sonne in ihrer mittleren Entfernung erscheint.

 $\frac{p_{\odot}}{\Delta}$, der Winkel, unter dem a von einem Gestirn in der Entfernung Δ erscheint, heißt die Aquatorial-Horizontalparallaxe,

 $\frac{\rho p_{\odot}}{\Lambda}$ die Horizontalparallaxe.

Heliozentrischer Ort.

Bei Zugrundelegung äquatorialer Koordinaten wird $x = -R \cos \odot$, $y = -R \sin \odot \cos \varepsilon$, $z = -R \sin \odot \sin \varepsilon$, worin R den Radiusvektor in der Erdbahn bezeichnet. Damit wird:

$$\begin{split} \alpha_{\text{hel.}} &= \alpha_{\text{geoz.}} = p_* \, R \, (\cos \odot \sin \alpha - \sin \odot \cos \epsilon \cos \alpha) \sec \delta \\ \delta_{\text{hel.}} &- \delta_{\text{geoz.}} = p_* R \, \{ (\cos \epsilon \sin \alpha \sin \delta - \sin \epsilon \cos \delta) \sin \odot + \sin \delta \cos \alpha \cos \odot \}. \end{split}$$

In ekliptikalen Koordinaten ist einfacher

$$\begin{array}{l} \lambda_{\rm hel.} - \lambda_{\rm geoz.} = p_* \; R \sin{(\lambda - \odot)} \sec{\beta} \\ \beta_{\rm hel.} - \beta_{\rm geoz.} = p_* \; R \cos{(\lambda - \odot)} \sin{\beta}. \end{array}$$

Hierin bezeichnet p_* den Winkel, unter welchem die mittlere Entfernung Erde—Sonne von dem Stern aus erscheint, kurz die *Parallaxe* des Sterns.

Reduktion auf den scheinbaren Ort.

Zusammenfassend folgt:

Die Beobachtung eines Gestirns, befreit von den Instrumentalfehlern, der Refraktion und der täglichen Aberration, gibt die wahren (d. h. auf das wahre Äquin. des Beobachtungsmoments bezogenen) Koordinaten seines scheinbaren Orts; gesucht werden die mittleren (d. h. auf ein festes, mittleres Äquin. bezogenen) Koordinaten seines wahren Orts. Zu dem Zwecke hat man bei Fixsternen zunächst die jährliche Aberration und — für die wenigen Sterne, deren Parallaxen einen verbürgten Wert haben, - die jährliche Parallaxe anzubringen; man erhält dadurch den wahren heliozentrischen Ort, bezogen auf das wahre Äquin. der Beobachtungsepoche. Bei den Körpern des Sonnensystems hat man nur die tägliche Parallaxe, berechnet für die Beobachtungszeit, anzubringen, um wahre geozentrische Örter, bezogen auf das wahre Äquin. der Beobachtungszeit, und gültig für die um die Lichtzeit verminderte Beobachtungszeit zu erhalten. Die Beseitigung der Nutationsbeträge überträgt dann die Koordinaten auf das momentane mittlere Äquin., von wo aus man sie durch Berücksichtigung der Präzession auf das mittlere Äquin. des Jahresanfangs (annus fictus) und schließlich auf das einer festen Normalepoche zu übertragen pflegt. — Um umgekehrt die Theorie, die die mittleren Koordinaten der wahren Örter, auf ein Normaläquin. bezogen, gibt, mit den Beobachtungen vergleichbar zu machen, bezieht man sie zunächst durch Berücksichtigung des Präzessionseffekts auf das mittlere Äquin. des Jahresanfangs. Die weiteren Reduktionen werden durch sachgemäße Umkehrung des soeben erörterten Verfahrens erhalten.

Bei Fixsternen vereinigt man die Einzelreduktionen:

vom mittleren Äquin. des Jahresanfangs auf das momentane mittlere Äquin.,

von diesem auf das momentane wahre Äquin., und die Wirkung der Aberration

zur Reduktion auf den scheinbaren Ort (Reductio ad locum apparentem, Red. a. l. app.). Sie läßt sich, wenn mit t die seit dem Beginn des annus fictus verflossene Zeit in Teilen des tropischen Jahres, mit α' , δ' die wahren Koordinaten des scheinbaren Orts, mit α , δ die mittleren (d. h. auf das mittlere Äquin.

des Jahresanfangs bezogenen) Koordinaten des wahren Orts bezeichnet werden, in folgende Formen bringen.

Erste Form.

$$\alpha' - \alpha = \alpha A + b B + c C + d D + E$$

$$\delta' - \delta = \alpha' A + b' B + c' C + d' D;$$

hierin sind:

$$a = m + n \sin \alpha \tan \beta$$
 $a' = n \cos \alpha$ $b = \cos \alpha \tan \beta$ $b' = -\sin \alpha$ $c = \cos \alpha \sec \delta$ $c' = \tan \beta \cos \delta - \sin \alpha \sin \delta$ $d = \sin \alpha \sec \delta$ $d' = \cos \alpha \sin \delta$

$$A = t - (0.34215 + 0.00031 T) \sin \Omega + 0.00415 \sin 2 \Omega - 0.02526 \sin 2 L + 0.00251 \sin q'$$

$$-0.00099 \sin{(2 L + g')} + 0.00042 \sin{(2 L - g')}$$

$$+$$
 0.00025 $\sin(2L - \Omega) +$ 0.00010 $\sin(2\omega + \Omega)$

$$-0.00405 \sin 2 (+0.00135 \sin g - 0.00068 \sin (2 (-\Omega))$$

$$-0.00052 \sin (2 (+g) + 0.00030 \sin (2 (-2 L - g))$$

$$+ 0.00023 \sin (2 (-9) + 0.00012 \sin (2 (-2 L))$$

$$B = -(9''.210 + 0''.0009 T) \cos \Omega + 0''.090 \cos 2 \Omega -0''.551 \cos 2 L - 0''.022 \cos(2 L + g') + 0''.009 \cos(2 L - g')$$

+ 0".007
$$\cos(2L - \Omega)$$
 + 0".003 $\cos(2\omega + \Omega)$
- 0".089 $\cos(2(\omega - \Omega))$

$$-\circ$$
".011 $\cos(2(+g) + \circ$ ".005 $\cos(2(-g)$

$$E=-$$
0".044 $\sin\Omega+$ 0".001 \sin 2 $\Omega-$ 0".003 \sin 2 L

C = -20".47 $\cos \odot \cos \varepsilon$

D = -20".47 $\sin \odot$.

Die Beziehung zu den früheren Bezeichnungen ist gegeben durch:

$$A = t + \frac{1}{n}\sin\varepsilon\Delta\psi$$

$$B = -\Delta\varepsilon$$

$$E = (\cos\varepsilon - \frac{m}{n}\sin\varepsilon)\Delta\psi.$$

Zweite Form.

$$\alpha' - \alpha = f + g \sin(G + \alpha) \tan \beta + h \sin(H + \alpha) \sec \delta$$

 $\delta' - \delta = g \cos(G + \alpha) + h \cos(H + \alpha) \sin \delta + i \cos \delta$

Hierin haben f, g, h, i, G, H die Bedeutung:

$$f = mA + E$$
 $i = C \operatorname{tang} \varepsilon$
 $g \sin G = B$ $h \sin H = C$
 $g \cos G = nA$ $h \cos H = D$.

Die erste Form wird hauptsächlich verwendet, wenn man für einen Stern eine ganze Reihe von Örtern rechnen muß, hingegen wendet man besser die zweite Form an, wenn es gilt, für einen Zeitpunkt mehrere Sterne zu reduzieren. — Die Glieder mit A, B, E, resp. f, g, G stellen den Einfluß der Präzession und Nutation, die Glieder mit C, D, resp. i, h, H den der Aberration dar.

Die vorstehenden Differential-Näherungsformeln reichen für polnahe Sterne nicht mehr aus. Bezeichnet man für diese die nach den gewöhnlichen Formeln berechneten Reduktionsbeträge mit $\Delta\alpha_0$, $\Delta\delta_0$, so geben die Gleichungen von Fabritius:

$$\Delta \alpha = \Delta \alpha_0 + [4.6856 - 10] \operatorname{tg} \delta_0 \Delta \alpha_0 \Delta \delta_0$$

 $\Delta \delta = \Delta \delta_0 - [6.7367 - 10] \sin \delta_0 \cos \delta_0 (\Delta \alpha_0)^2$,

die wegen der höheren Glieder verbesserten Werte der Red. ad l. app. Die Zahlen in eckigen Klammern sind Logarithmen.

Inwieweit die im obigen angeführten Ausdrücke in den Ephemeriden und Tabellen des Jahrbuchs zur Anwendung gelangt sind, ist im folgenden ausführlich angegeben.

Besondere Erläuterungen zu den Ephemeriden und Tafeln des Jahrbuchs.

Das Jahrbuch gibt die Örter der Wandelsterne in geozentrischen und in heliozentrischen Koordinaten, die geozentrischen sind, abgesehen von Länge und Breite der Sonne, äquatoriale und im allgemeinen auf das instantane wahre Äquinoktium bezogen, die heliozentrischen sind ekliptikale und auf ein mittleres Normal-Äquinoktium bezogen. Die Zeitpunkte, für die sie gelten, sind, wenn nicht ausdrücklich eine andere Zeit angegeben wird, in mittlerer Berliner Sonnenzeit ausgedrückt.

Die Örter der Fixsterne sind einmal als wahre, auf das mittlere Äquinoktium des Jahresanfangs bezogen, und dann in Ephemeridenform als scheinbare, auf das instantane wahre Äquinoktium bezogen, gegeben.

Zur Erläuterung ist im einzelnen folgendes zu bemerken:

Reduktionselemente (S. 1).

Diese Zusammenstellung gibt für die mittleren Mittage, von 10 zu 10 Tagen fortschreitend:

1) Die mittlere Schiefe der Ekliptik (s. S. [5]).

2) Die wahre Schiefe der Ekliptik, entstanden aus der vorhergehenden durch Hinzufügung der Hauptglieder der Nutation in Schiefe, nämlich: +0".5519cos 2 ① +0."0092cos(①+281° 26')+9".2101cos Ω -0".0895cos 2 Ω .

- 3) Die (allgemeine) Präzession in Länge, gerechnet vom Anfang des annus fictus an (s. S. [5]).
- 4) Die Hauptglieder der Nutation in Länge, das ist wahre minus mittlere Länge, nämlich:

- 1".2725 sin 2
$$\odot$$
 + 0".1477 sin (\odot + 81° 47')
- 17".2337 sin Ω + 0".2070 sin 2 Ω.

Die kurzperiodischen Glieder in Schiefe und Länge, die hier bei dem 10-tägigen Intervall naturgemäß fortgelassen sind, finden sich in der letzten Kolumne der Sonnenephemeride von Tag zu Tag aufgeführt.

- 5) Die Aberration der Sonne in Länge, berechnet aus 20".47: R.
- 6) Die Äquatorial-Horizontalparallaxe der Sonne, berechnet aus 8".80: R.

Sonnenephemeride (S. 2-41).

Der erste Teil der Sonnenephemeride (S. 2-21) gibt auf den linken Seiten für jeden mittleren Berliner Mittag:

- 1) Die geozentrischen, äquatorialen Koordinaten (α, δ) des scheinbaren Sonnenorts, bezogen auf das jedesmalige wahre Äquinoktium, zugleich mit der ersten Differenzreihe. Diese Angaben sind direkt mit den Beobachtungen vergleichbar. Die Nutationsglieder kurzer Periode sind, wie im Vorwort erwähnt, weggelassen.
 - 2) Die Zeitgleichung = Mittlere Zeit Wahre Zeit.
- 3) Die Durchgangsdauer der Sonnenscheibe durch den Meridian in Sternzeit, berechnet aus

$$\frac{2}{15}H(1+\frac{\Delta\alpha}{86400})\sec\delta.$$

[Δα tägliche Bewegung der Sonne in AR].

4) Den scheinbaren geozentrischen Halbmesser H der Sonnenscheibe, berechnet aus 959".63: R (nach Auwers).

Die rechte Seite gibt:

1) Die geozentrischen ekliptikalen Koordinaten (λ, β) des wahren Sonnenorts, bezogen auf das mittlere Äquinoktium des Jahresanfangs. Diese Angaben finden bei Bahnberechnungen u. dergl. sowie $\log R$. Verwendung.

2) Die Sternzeit im mittleren Berliner Mittag.

Um für einen anderen Erdort der östlichen Längendifferenz AL (in Stunden) gegen Berlin die Sternzeit in seinem mittleren Mittag zu erhalten, ist von diesen Angaben abzuziehen: 98.8565 dL. Diese Werte finden sich unter der Überschrift: »Korr. der Sternzeit« im Verzeichnis der Sternwarten (S. 465-472).

3) Die von der Mondlänge abhängigen kurzperiodischen Glieder der

Nutation in Länge: $-0''.2038 \sin 2 (+0''.0676 \sin g)$

und Schiefe: +0".0884 cos 2 (.

Auf S. 22-41 folgen, bezogen auf das mittlere Äquinoktium des Jahresanfangs, die rechtwinkligen, geozentrischen, äquatorialen Sonnen-koordinaten für oh und 12h mittlere Berliner Zeit mit ihren ersten Differenzen; daneben stehen von Tag zu Tag ihre Reduktionen auf das mittlere Äquinoktium des benachbarten Jahrzehntanfanges 1910.0 in Einheiten der siebenten Dezimale; sie dienen zur bequemen Verbindung der Koordinatenangaben aufeinanderfolgender Jahre bei Rechnungen über kleine Planeten und Kometen.

Aus λ und β , der Länge und Breite der Sonne, werden die rechtwinkligen Koordinaten berechnet nach:

$$X = R \cos \lambda$$

 $Y = R \sin \lambda \cos \varepsilon - 19.3 R\beta$ [Einheiten der 7. Dezimale]
 $Z = R \sin \lambda \sin \varepsilon + 44.5 R\beta$ [» » »]

Die Reduktionen dieser auf das wahre Äquinoktium bezogenen Größen auf das mittlere Äquinoktium des Jahresanfangs sind:

$$dX = Y \sec \varepsilon d\lambda$$

 $dY = -X \cos \varepsilon d\lambda + Z d\varepsilon + 19.3 R d\beta$
 $dZ = -X \sin \varepsilon d\lambda - Y d\varepsilon - 44.5 R d\beta$;

hierin sind:

 $d\lambda = \text{Präzession} + \text{Nutation in Länge}$ in Bogenmaß, $d\varepsilon = \text{Präzession} + \text{Nutation in Schiefe}$ in Prazesion in Practice in Proposition des

 $d\beta = Pr$ äzession in Breite, in Bogensekunden.

Die Reduktion der rechtwinkligen Sonnenkoordinaten vom mittleren Äquinoktium t_1 auf das mittlere t_2 ($\tau = t_2 - t_1$) geschieht nach den Formeln:

$$\begin{split} dX_0 &= m Y_0 \tau - n Z_0 \tau - \frac{1}{2} (m^2 + n^2) X_0 \tau^2 \\ dY_0 &= m X_0 \tau - \frac{1}{2} m^2 Y_0 \tau^2 - \frac{1}{2} m n Z_0 \tau^2 \\ dZ_0 &= n X_0 \tau - \frac{1}{2} m n Y_0 \tau^2 - \frac{1}{2} n^2 Z_0 \tau^2 ; \end{split}$$

m und n (in Bogenmaß) sind die einjährigen Präzessionsbeträge in Rektaszension und Deklination.

Mondephemeride (S. 42-81).

Die linken Seiten der Mondephemeride geben für oh und 12 h mittlere Zeit Berlin:

- 1) Die wahre Rektaszension und Deklination des Mondes mit den ersten Differenzen.
- 2) Den log. Sinus der Äquatorial-Horizontalparallaxe $p_{\mathbb{C}}$ des Mondes.
 - 3) Den scheinbaren geozentrischen Mondhalbmesser r_{ℓ} , berechnet aus $\sin r_{\ell} = 0.2725 \sin p_{\ell}$.

Die rechten Seiten enthalten für den oberen (O) oder unteren (U) Berliner Meridiandurchgang des Mondes:

- 1) Die mittlere Berliner Zeit dieses Durchgangs.
- 2) Die Rektaszension und Deklination des Mondes.
- 3) Die halbe Durchgangsdauer der Mondscheibe in Sternzeit, berechnet mit Hilfe des geozentrischen Halbmessers des Mondes und der stündlichen Bewegung in AR.
- 4) Die AR.-Bewegung des sichtbaren Mondrandes für eine Stunde Länge, d. h. für das Zeitintervall, welches zwischen den beiden Durchgängen des Mondrandes durch zwei um je eine halbe Stunde östlich und westlich von Berlin gelegene Meridiane versließt.

Auf S. 80 und 81 finden sich noch die Epochen der Phasen, sowie des Perigäums und Apogäums des Mondes.

Ephemeride für den Mondkrater Mösting A (S. 82-86).

Die Ephemeride des Mondkraters Mösting A dient zwei verschiedenen Zwecken: erstens zur genauen Bestimmung von Mondörtern am Himmel durch Meridianbeobachtung des Kraters, zweitens zur Bestimmung der selenographischen Koordinaten weiterer Punkte der Mondoberfläche durch deren mikrometrischen Anschluß an Mösting A.

Sie gilt für die mittlere Mitternacht in Berlin und enthält für die Tage, an welchen Mösting A innerhalb der Beleuchtungsgrenze liegt, die Unterschiede $a_{\alpha}-a_k$ in Rektaszension und $\delta_{\alpha}-\delta_k$ in Deklination zwischen der Mondmitte und dem Krater vom Erdmittelpunkt aus gesehen, sowie den Logarithmus des Sinus der Äquatorial-Horizontalparallaxe p_k des Kraters, welche von der des Mondes p_{α} zu unterscheiden ist, mit den zugehörigen Differenzen.

Zur Anwendung der Ephemeride auf Meridianbeobachtungen des Kraters interpoliere man unter strenger Berücksichtigung der zweiten Differenzen $\alpha_{\mathbb{C}}-a_k$, $\delta_{\mathbb{C}}-\delta_k$ und log sin p_k mit der Zeit des Durchgangs des Kraters durch den Meridian. Dann befreie man die beobachtete Deklination des Kraters von der Höhenparallaxe, indem man diese mit dem Argument der wahren Kraterdeklination (nicht Monddeklination), unter Benutzung von p_k , berechnet. Bringt man alsdann $\alpha_{\mathbb{C}}-a_k$ und $\delta_{\mathbb{C}}-\delta_k$ an die Beobachtung an, so hat man die geozentrische AR. und Dekl. des Mondes für die Beobachtungszeit, d. h. für die Kulmination des Kraters (nicht des Mondes).

Für Beobachtungen außerhalb des Meridians interpoliere man $\alpha_{\alpha} - \alpha_{k}$, $\delta_{\alpha} - \delta_{k}$ und $\log \sin p_{k}$ mit der Zeit der Beobachtung. Man findet dann die gesehene, mit Parallaxe behaftete Differenz $\alpha'_{\alpha} - \alpha'_{k}$ offenbar, indem man die mit p_{α} und dem Mondort berechnete Parallaxe $\alpha'_{\alpha} - \alpha_{\alpha}$ des Mondes

in AR. zu $\alpha_{\alpha} - \alpha_k$ addiert und dann die mit p_k und dem Kraterort berechnete Parallaxe $\alpha'_k - \alpha_k$ des Kraters in AR. subtrahiert. Es ist nämlich:

$$\alpha'_{\alpha} - \alpha'_{k} = \alpha_{\alpha} - \alpha_{k} + (\alpha'_{\alpha} - \alpha_{\alpha}) - (\alpha'_{k} - \alpha_{k})$$
 und ebenso
$$\delta'_{\alpha} - \delta'_{k} = \delta_{\alpha} - \delta_{k} + (\delta'_{\alpha} - \delta_{\alpha}) - (\delta'_{k} - \delta_{k}).$$

Verbindet man die so erhaltenen scheinbaren Abstände zwischen der Mondmitte und Mösting A mit mikrometrischen Messungen zwischen Mösting A und einem zweiten Krater, so erhält man die scheinbare Lage des letzteren gegen die Mondmitte und kann hieraus mit Hülfe von $\alpha'_{\mathfrak{C}}$ und $\delta'_{\mathfrak{C}}$, mit der auf Seite 87 angegebenen Lage des Mondäquators und der mit den Angaben auf Seite 452 berechneten physischen Mondlibration die selenographische Länge und Breite des zweiten Kraters berechnen. Hierzu dienen die im folgenden angeführten Formeln.

Bezeichnet man mit a' und δ' die scheinbare AR. und Dekl. des an Mösting A angeschlossenen Kraters, so hat man:

$$s \sin \pi_m = (\alpha' - \alpha'_{\mathcal{C}}) \cos \frac{1}{2} (\delta' + \delta'_{\mathcal{C}})$$

$$s \cos \pi_m = (\delta' - \delta'_{\mathcal{C}})$$

$$\pi = \pi_m - \frac{1}{2} (\alpha' - \alpha'_{\mathcal{C}}) \sin \frac{1}{2} (\delta' + \delta'_{\mathcal{C}})$$

$$\sin (K + s) = \sin s \csc h'.$$

h' ist der scheinbare Radiusvector des Kraters, der aus h, dem vom Erdmittelpunkt aus gesehenen Radiusvector, durch Anbringen der Parallaxe gewonnen wird. Ist die Entfernung des Kraters vom Mondschwerpunkt gänzlich unbekannt, so möge für h der aus Sternbedeckungen folgende Wert des Mondhalbmessers eingesetzt werden.

$$\sin d = -\sin \delta'_{\alpha} \cos K + \cos \delta'_{\alpha} \sin K \cos \pi$$

$$\cos d \cos (a - a'_{\alpha}) = -\cos \delta'_{\alpha} \cos K - \sin \delta'_{\alpha} \sin K \cos \pi$$

$$\cos d \sin (a - a'_{\alpha}) = \sin K \sin \pi$$

$$\sin \beta = \sin d \cos i - \cos d \sin i \sin (a - \Omega')$$

$$\cos \beta \sin \lambda' = \sin d \sin i + \cos d \cos i \sin (a - \Omega')$$

$$\cos \beta \cos \lambda' = \cos d \cos (a - \Omega').$$

Die Größen i und Ω' entnehme man der Seite 87.

$$\lambda = \lambda' - 180^{\circ} - L - (\Delta - \%).$$

L, die mittlere Länge des Mondes, findet sich auf Seite 88, wie $\Delta-3$ auf Seite 87.

Die so erhaltenen Werte von λ und β beziehen sich auf den mittleren (vom Einfluß der physischen Libration freien) Mondäquator; die Transformation auf den wahren erfolgt durch die Korrektionen:

$$d\lambda = +12'' \sin M - 59'' \sin M' - 18'' \sin 2 \omega + tg\beta[-108'' \cos(\omega + \lambda) + 37'' \cos(\omega - \lambda) - 11'' \cos(M + \omega - \lambda)] d\beta = +108'' \sin(\omega + \lambda) + 37'' \sin(\omega - \lambda) - 11'' \sin(M + \omega - \lambda).$$

Die Grössen M, M', w sind der Seite 452 zu entnehmen.

Bringt man diese Korrektionen $d\lambda$ und $d\beta$ an λ und β an, so erhält man die selenographischen Koordinaten des Kraters

$$\lambda_{\circ} = \lambda + d\lambda$$
, $\beta_{\circ} = \beta + d\beta$.

Der Berechnung der Ephemeride des Kraters Mösting A liegen folgende von F. Hayn ermittelte Konstanten (Selenographische Koordinaten III, Seite 49) zugrunde:

$$\lambda_{\circ} = -5^{\circ} \text{ 10' 13''}, \qquad \beta_{\circ} = -3^{\circ} \text{ 10' 58''}$$
 $h = 15' 34''.71 \text{ entsprechend der Parallaxe } 57' 2''.27.$

Für die Reduktion auf den mittleren Mondäquator wurden die Werte angenommen:

$$d\lambda = -12'' \sin M + 59'' \sin M' + 18'' \sin 2 \omega$$

 $d\beta = -145'' \sin \omega + 11'' \sin (M + \omega)$

so daß die auf den mittleren Mondäquator bezogenen selenographischen Koordinaten des Kraters Mösting A sind:

$$\lambda = \lambda_{\circ} + d\lambda, \qquad \beta = \beta_{\circ} + d\beta.$$

Lage des Mondäquators. Mondbewegung (S. 87 und 88).

Die beiden Tafeln auf Seite 87 und 88 dienen, neben dem soeben angegebenen Zweck, zur Berechnung der optischen Libration des Mondes (in Verbindung mit der Tafel auf Seite 453 und 454) und zur Ermittelung des Winkels C, welchen der Mondmeridian des Mittelpunktes der scheinbaren Mondscheibe mit dem Deklinationskreise bildet.

Die Formeln für die Berechnung der optischen Libration sind auf Seite $_{454}$ vollständig aufgeführt. Der Winkel C ergibt sich aus folgender Formel:

$$\sin C = -\sin i \frac{\cos (l + \Delta - \xi)}{\cos \delta} = -\sin i \frac{\cos (\alpha - \Omega')}{\cos \delta'},$$

worin

i . . . die Neigung des Mondäquators gegen den Erdäquator,

1...das Stück des Mondäquators vom aufsteigenden Knoten im Erdäquator bis zum aufsteigenden Knoten in der Ekliptik,

 Ω' . . . den aufsteigenden Knoten des Mondäquators im Erdäquator,

88 . . . den aufsteigenden Knoten des Mondäquators in der Ekliptik,

 α, δ . . Rektascension und Deklination des Mittelpunktes der Mondscheibe, gesehen vom Beobachtungsort aus,

 $l',\ b'$. . die optische Libration in selenographischer Länge und Breite, l_n . . . die mittlere Länge des Mondes

bezeichnen und l = l' + l. gesetzt wird.

 ${\cal C}$ wird vom nördlichen Teil des Deklinationskreises nach Osten positiv gerechnet.

Bei der Berechnung von i, J, Ω' ist die Neigung des Mondäquators gegen die Ekliptik nach F. Hayn (Selenographische Koordinaten III, Seite 49) zu $J=\mathfrak{1}^{\circ}$ 32' 6" angenommen worden. Die Zahlen geben die Lage des mittleren Mondäquators (ohne physische Libration).

Die in der ersten Kolumne der Tafel auf Seite 88 aufgeführte Länge des aufsteigenden Knotens der Mondbahn auf der Ekliptik dient auch zur Berechnung der Nutationsausdrücke.

Auf- und Untergang von Sonne und Mond (S. 89-93).

Die Zeiten der Auf- und Untergänge von Sonne und Mond für Berlin in mittlerer Berliner Zeit, welche als Grundlage für die Kalenderrechnungen benachbarter Orte häufig Verwendung finden, sind berechnet mit Berücksichtigung der Horizontalparallaxe 57' und der Horizontalrefraktion 33'.

Planetenephemeriden (S. 94-148).

Die geozentrischen Örter der Planeten sind für Merkur, Venus und Mars von Tag zu Tag, für Jupiter, Saturn, Uranus und Neptun von 2 zu 2 Tagen mit ihren ersten Differenzen gegeben, und zwar in wahren, d. h. auf das momentane Äquinoktium bezogenen Koordinaten des wahren Orts, für oh mittlere Berliner Zeit. Zu ihrer Vergleichung mit den Beobachtungen hat man nur die Beobachtungszeiten um die jedesmalige Lichtzeit (498°.4 \(\Delta \)) zu vermindern. Die hierzu, sowie zur Berechnung der Parallaxe (8°.80: \(\Delta \)) erforderliche Kenntnis der geozentrischen Entfernung \(\Delta \) des Planeten (\(\Delta \) in Einheiten der mittleren Entfernung Sonne— Erde) vermittelt die »Log. \(\Delta \)« überschriebene Kolumne.

Die vorletzte Kolumne jeder Seite enthält unter der Bezeichnung »Östlicher Stundenwinkel« des Planeten einen genäherten Wert für die mittlere Zeit seiner oberen Kulmination. Die letzte Kolumne gibt den halben Tagbogen für die im Berliner Mittag stattfindende Deklination und die Polhöhe von Berlin, gerechnet unter Berücksichtigung der Horizontalrefraktion 33'.

Für die Reduktion und die Vergleichung der Planetenbeobachtungen mit der Ephemeride ist die Kenntnis der scheinbaren Halbmesser erforderlich. Man kann für dieselben in der Einheit der Entfernung annehmen:

für	Merkur	Halbmesser		3"-34		
>>	Venus	>>		8.78		
>>	Mars	>>		4.68		
>>	Jupiter	3)	(Äquatorial)	99 .8,	(Polar)	92".6
<i>"</i>	Saturn	>>	(Äquatorial)	81 .4,	(Polar)	73 .+
*	Uranus	»		34 .7		
¥	Neptun	>>		45		

Die heliozentrischen Ephemeriden der Hauptplaneten (S. 144—148) geben den Log. des Radius vector, die Länge in der Bahn, deren Reduktion auf die Ekliptik und die Breite, außerdem bei den Planeten Jupiter, Saturn, Uranus und Neptun noch den Winkel B_o , welchen der Radius vector mit derjenigen Bahnebene macht, für welche die bei jedem Planeten unter den Kolumnen hinzugefügten Angaben über Ω und Ω gelten.

Bei Jupiter, Saturn, Uranus und Neptun stellen Ω und i die Bahnlage für die Epoche und das Äquinoktium des benachbarten Jahrzehntanfangs dar; bei Merkur, Venus und Mars ist die Epoche der Jahresanfang, das Äquinoktium das des benachbarten Jahrzehntanfangs.

(Über die Verwendung von B_o bei Störungsrechnungen siehe die ausführlichere Erläuterung im Jahrbuch für 1880 und 1881.)

Die Genauigkeit und Ausführlichkeit dieser heliozentrischen Angaben ist ihrem Hauptzweck, zur Berechnung der speziellen Störungen zu dienen, angepaßt.

Die unten beigefügten Werte der Planetenmassen sind die den Tafeln von Newcomb und von Hill zugrunde liegenden, für Mars und Saturn sind sie identisch mit den aus Trabantenbeobachtungen von A. Hall, resp. von Bessel abgeleiteten Werten, für die anderen Planeten beruhen sie auf den Störungen, die sie ausüben. Für die Erde ist noch besonders zu erwähnen, daß die Masse von »Erde + Mond« gegeben ist, heliozentrischer Radius vector und Länge sich aber auf den Erdmittelpunkt und nicht auf den Schwerpunkt des Systems »Erde + Mond« beziehen.

Mittlere Örter von 925 Fixsternen (S. 149-172).

Die mittleren Örter der 925 Fixsterne sind aus den Daten der Veröffentlichung Nr. 33 des Königlichen Astronomischen Recheninstituts mit den daselbst angegebenen Hilfsgrößen für Präzession und Eigenbewegung abgeleitet worden. Nur die mittleren Örter der 20 Polsterne sind durch mechanische Quadratur berechnet.

Scheinbare Örter von 573 Fixsternen (S. 173-371).

Die scheinbaren Örter sind für den Moment der oberen Kulmination im Berliner Meridian gegeben, und zwar zunächst für 18 weniger als 10° von den Polen entfernte Sterne von Tag zu Tag, in Rektaszension auf 0°.01, in Deklination (im Einklang damit) auf 0°.01 angesetzt. Die Anordnung ist eine derartige, daß für jeden Zeitraum einer Seite sämtliche 9 (entweder nördliche oder südliche) Polsterne nebeneinander aufgeführt sind, wie es für den Gebrauch am geeignetsten erscheint. Hierbei sind auch die Glieder zweiter Ordnung der Red. ad. l. app.« nach besonders dafür hergestellten handschriftlichen Tafeln berücksichtigt.

Es folgen die scheinbaren Örter der übrigen 555 Sterne von 10 zu 10 Tagen, in Rektaszension auf 08.01, in Deklination auf 08.11 angesetzt; sie beziehen sich auf die Epoche derjenigen oberen Kulmination, welche an dem nebenstehenden wahren Sonnentage stattfindet. Der Übergang einer Kulmination auf den vorangehenden wahren Sonnentag ist dadurch bezeichnet, daß das Datum des Tages, an welchem 2 obere Kulminationen stattfinden, vor den Rektaszensionen aufgeführt ist.

Am Fuß der Ephemeriden ist der mittlere Ort eines jeden Sterns für den Anfang des Jahres, außer für die Polsterne, wieder angegeben, dazu die Werte von tg δ und sec δ (bei den Polsternen für die Deklination der Seitenmitte giltig), welche bei der Reduktion der Meridianbeobachtungen nach der hierfür am zweckmäßigsten erscheinenden Besselschen Formel gebraucht werden.

Die kurzperiodischen Mondglieder der Nutation sind durchweg unberücksichtigt geblieben, können aber in den Fällen, in denen ihre Mitnahme wünschenswert erscheint, nach den Formeln auf S. 372 und mit Hülfe der Tafel auf S. 384 und 385 berechnet worden. Nur bei den Polsternen sind diese Glieder, mit Ausnahme von f', schon berechnet, aber gesondert unter der Überschrift (hinzugefügt.

Die jährliche Parallaxe ist bei folgenden Sternen, bei denen sie o".20 übersteigt und hinreichend verbürgt erscheint, nämlich:

Nr. 59 τ Ceti mit 0".31 Nr. 538 α Centauri mit 0".75 Nr. 257 α Can. maj. » 0.38 Nr. 745 α Aquilae » 0.23 Nr. 291 α Can. min. » 0.33 Nr. 793 61 Cygni » 0.30

bereits berücksichtigt. Von den nicht mit Ephemeriden versehenen Sternen des F. K. besitzt noch Nr. 825 ε Indi eine Parallaxe von 0".25.

Reduktionstafeln (S. 372-397).

Auf die scheinbaren Örter der Sterne folgt S. 372 eine Zusammenstellung der Formeln, nach welchen die Reduktionskonstanten der darauf folgenden Tafeln berechnet sind.

Die Größen zur »Reduktion auf den scheinbaren Ort« sind in ihrer ersten Form, A, B, C, D, E gegeben für 18^h40^m Sternzeit des Normalmeridians = 6^h38^m.9 Sternzeit Berlin:

1) Auf S. 373 im Intervall von 10 Sternzeittagen, ohne Berücksichtigung der von der Mondlänge abhängigen Mondglieder.

Diese Tafel dient hauptsächlich zur Berechnung von Sternephemeriden für die Epochen der Meridiandurchgänge. Wegen ihrer logarithmischen Form ist sie zur Interpolation nicht geeignet. Man wird deshalb zweckmäßig die Interpolation erst nach der Summierung der einzelnen, unmittelbar für die Epochen der Tafel berechneten Glieder vornehmen.

2) Auf S. 386-395 für jeden Sterntag, mit Berücksichtigung der kurzperiodischen Mondglieder. Um den Gebrauch dieser Tafel zu

erleichtern, sind jedesmal an derjenigen Stelle, wo die Werte einer der Konstanten durch Null gehen, neben den logarithmischen Angaben die Numeri der betreffenden Konstante beigesetzt.

Beiden Tafeln ist in einer Spalte die dem festen Sternzeitmoment jedesmal entsprechende mittlere Zeit vorangestellt; man wird hiernach auf jeden beliebigen Zeitpunkt, gegeben durch Datum, Sternzeit und Längendifferenz mit Berlin, übergehen können. Eine weitere Spalte gibt die seit Beginn des annus fictus verflossene Zeit in Bruchteilen des tropischen Jahres.

Die Reduktionsgrößen der zweiten Form, f, g, G, h, H, i, sind S. 374-383 von Tag zu Tag für die mittlere Mitternacht Berlin ohne die von der Mondlänge abhängigen Nutationsglieder gegeben. In der letzten Kolumne ist jedoch, um sie gegebenenfalls berücksichtigen zu können, unter dem Zeichen (das Argument »mittlere Mondlänge« für die Tafeln der Seiten 384 und 385 angeführt, wobei die Peripherie in 1000 Teile geteilt gedacht ist.

Diese Tafeln (S. 384 und 385) enthalten die Hülfsmittel zur Berücksichtigung der schnell veränderlichen Nutationsglieder bei der Red. ad l. app. in beiden Formen auf Grund der Formeln:

$$A' = -0.00405 \sin 2 (+ 0.00134 \sin ((- 163°40') B' = -0".0884 \cos 2 (f' = -0".1865 \sin 2 (+ 0".0618 \sin ((- 163°40') g' \sin G' = -0".0884 \cos 2 (g' \cos G' = -0".0811 \sin 2 (+ 0".0269 \sin ((- 163°40').$$

Die hauptsächlichste Vernachlässigung liegt darin, daß als Wert des Perigäums der Mondbahn für das ganze Jahr der für 1913.5 berechnete Wert: $\Gamma' = \Omega + \omega = 163^{\circ}40'$ angenommen ist.

Die Tafel auf S. 396 und 397 dient zur Übertragung wahrer Örter von dem *mittleren* Äquinoktium des benachbarten Jahrzehntanfangs auf das *instantane* wahre Äquinoktium.

Sonnen- und Mondfinsternisse (S. 398-405).

Die Sonnenfinsternisse sind in der Form berechnet worden, welche Hansen (Theorie der Sonnenfinsternisse und verwandten Erscheinungen. Abhandlungen der K. Sächsischen Gesellschaft der Wissenschaften IV) der Behandlung dieses Problems gegeben hat.

Die Bezeichnungen und Einführungen von Hansen sind auch im Jahrbuch bei der tabellarischen Aufstellung der Rechnungsresultate durchgängig beibehalten worden, so daß es genügen wird, zu ihrer Erläuterung auf die erwähnte Abhandlung zu verweisen (siehe besonders die übersichtliche Anführung der einzelnen Formeln von Seite 434 an). Es wird hier nur erforderlich sein, in aller Kürze anzugeben, auf welche Weise man mit Hilfe der auf Seite 399, 401 und 404 gegebenen Hansenschen Elemente der Sonnenfinsternisse Zeit und Umstände der Finsternis für jeden Ort innerhalb der Grenzkurven berechnen kann.

Der Ort sei gegeben durch seine (nach Osten gezählte) Länge von Berlin . . . λ , oder von Greenwich . . . $\lambda_{\circ} = \lambda + 13^{\circ} 23'.7$ und durch seine geographische Breite φ .

Man bilde zuerst tang $\varphi_1 = (1-c)$ tang φ , wo c die Abplattung der Erde ist, also $\log(1-c) = 9.99855$ angenommen werden kann, sodann:

$$\xi = \cos \varphi_1$$

$$\eta = (1 - c) \sin \varphi_1.$$

Hierauf muß man für die Epoche des fraglichen Phänomens, sei es nun erste und letzte, äußere oder innere Berührung, oder größte Phase, einen Näherungswert der wahren Ortszeit annehmen.

Hierzu kann man die anderweitigen Angaben des Jahrbuchs, insbesondere die eventuelle Angabe der Epochen des Eintritts der größten Phase auf der Zentrallinie zu Rate ziehen. Ein für die erste Annäherung hinreichender und bequemer Näherungswert der Ortszeit ist $\mu + \lambda$, wo μ die wahre Berliner Zeit der geozentrischen größten Phase ist. (Siehe Elemente der Finsternis.)

Sei der Näherungswert der Ortszeit t_o , so bilde man mit Hülfe der in dem Elementenverzeichnis des Jahrbuchs gegebenen Werte von γ , μ , n, u', f, δ' , g, G, k, K, welche man beiläufig mit dem Argumente der wahren Berliner Zeit $\tau = t_o - \lambda$ entnimmt, folgende Ausdrücke, welche als gemeinsame Grundlage der Annäherung für die Berechnung aller Phasen dienen können:

$$m \sin M = \gamma - \eta \cos g + \xi \sin g \sin (G + t_o)$$

$$m \cos M = (t_o - \lambda - \mu) \frac{n}{15} - \eta \cos k + \xi \sin k \cos (K + t_o)$$

$$m' \sin M' = -\varkappa \xi \sin g \cos (G + t_o)$$

$$m' \cos M' = n - \varkappa \xi \sin k \sin (K + t_o)$$

$$u_o = u' - (\eta \sin \delta' + \xi \cos \delta' \cos t_o) \tan g f$$

$$\varkappa = \frac{15 \cdot 3600}{206265} \qquad \lg \varkappa = 9.41797.$$

wo

Bei der Entnahme von u' und f hat man für innere Berührungen u'_i und f_i , für äußere Berührungen u'_a und f_a zu wählen.

Hierauf berechnet man:

$$\sin \chi' = \frac{m}{u_o} \sin (M + M')$$

$$t = t_0 - 15 \frac{m}{m'} \cos (M + M') + 15 \frac{u_o}{m'} \cos \chi'$$

wobei man, da zu sin χ' ein negativer und ein positiver Wert von $\cos \chi'$ sich ergibt, zwei Werte von t (zur ersten oder letzten Berührung gehörig) findet.

Mit jedem dieser beiden Werte von t rechnet man nun in zweiter Annäherung, wobei die Elemente γ , μ , n, u', f, δ' , g, G, k, K mit den wahren Berliner Zeiten $t-\lambda$ aus dem Elementenverzeichnis zu entnehmen sind:

$$\begin{split} m \sin M &= \gamma - \eta \cos g + \xi \sin g \sin (G + t_{\circ}) \\ m \cos M &= (t_{\circ} - \lambda - \mu) \frac{n}{15} - \eta \cos k + \xi \sin k \cos (K + t_{\circ}) \\ m' \sin M' &= - \kappa' \xi \sin g \cos \left[G + \frac{1}{2} (t_{\circ} + t) \right] \\ m' \cos M' &= n - \kappa' \xi \sin k \sin \left[K + \frac{1}{2} (t_{\circ} + t) \right] \\ u &= u_{\circ} + \kappa' \xi \cos \delta' \tan g f \sin \frac{1}{2} (t_{\circ} + t) \frac{(t - t_{\circ})}{15} \\ \kappa' &= 30 \cdot \frac{\sin \frac{1}{2} (t - t_{\circ})}{t - t_{\circ}} ; \end{split}$$

wo

(t-t_o) ist hierbei stets in Graden auszudrücken.

Mit den so gefundenen m, m', M, M' und u bildet man dann wieder

$$\sin \chi' = \frac{m}{u} \sin (M + M')$$

$$t = t_{\circ} - 15 \frac{m}{m'} \cos (M + M') + 15 \frac{u}{m'} \cos \chi'.$$

Von den beiden Lösungen für t benutzt man bei der zweiten und den folgenden Näherungen für den Eintritt natürlich nur die zum Eintritt, ebenso bei den Näherungen für den Austritt die zum Austritt gehörige.

Die in zweiter oder dritter Näherung gefundenen Werte t sind meistens schon genau genug die wahren Ortszeiten des gesuchten Eintritts oder Austritts, und die Positionswinkel der Eintritts- und Austrittspunkte (am Sonnenmittelpunkt von der Richtung zum Nordpol nach der Seite der wachsenden Rektaszensionen oder nach Osten hin gezählt) sind mit den beiden Werten von χ' , die der Sinus ergibt:

$$\vartheta = N' + M' - \chi',$$

wo N' aus dem Elementenverzeichnis zu entnehmen ist.

Um die Zeit der größten Phase zu berechnen, kann man zunächst die Werte t_{\circ} , m, m', M, M' aus der obigen ersten Annäherung benutzen und damit bilden: $t_{1} = t_{\circ} - 15 \frac{m}{m'} \cos{(M+M')}$.

Mit dem so gefundenen Werte t_1 bildet man für die Epoche $t_1 - \lambda$ wieder die Werte der Elemente und berechnet damit in zweiter Annäherung die Werte m, m', M, M', indem man in den Gleichungen der ersten Annäherung t_{\circ} durchgängig mit t_1 vertauscht. Man hat dann den genaueren Wert der Ortszeit der größten Phase:

$$t = t_1 - 15 \frac{m}{m'} \cos(M + M')$$

und zur Kontrolle für diese Zeit $M+M'=90^{\circ}$ oder $=270^{\circ}$, je nachdem der Mondmittelpunkt nördlich oder südlich vom Sonnenmittelpunkt vorbeigeht.

Zur Bestimmung der Größe der Versinsterung hat man zugleich:

$$u=m$$
,

welcher Wert bei zentraler Verfinsterung = o wird.

Die Größe in Teilen des Durchmessers i findet man mit einer für diese rohe Angabe genügenden Näherung:

$$i = \frac{u'_a - u}{u'_a - u'_i} \cdot \cdot \cdot \cdot$$

Zu den Angaben über die Mondfinsternisse (Seite 398 und 403) sei bemerkt, dass als Vergrößerungsfaktor des Erdschattens nach J. Hartmann ist.

Sternbedeckungen durch den Mond (S. 406-415).

Bei den Sternbedeckungen findet man zunächst (Seite 406 und 407) ein Verzeichnis derjenigen helleren Sterne (bis zur 5.5. Größe), welche im Laufe des Jahres 1913 für irgend einen Ort der Erdoberfläche vom Monde bedeckt werden können. Die Angaben für die nicht dem Fundamentalkatalog des Jahrbuchs angehörenden Sterne sind dem »Preliminary General Catalogue of 6188 Stars« von L. Boss entnommen; eine Beziehung beider Systeme aufeinander hat nicht stattgefunden.

Hierauf folgen in den zweispaltigen Seiten 408-414 die Hilfsmittel zur Berechnung der einzelnen Bedeckungen:

- in der r. Kolumne die Nr. des Sterns, welcher bedeckt wird, nach dem voranstehenden Verzeichnisse:
- in der 2. Kolumne die Zeit T der geozentrischen Konjunktion in AR. von Stern und Mondmittelpunkt in Monatstagen, Stunden und Minuten;

in der 3., 4. und 5. Kolumne die Werte folgender Ausdrücke:
$$q = \frac{\delta - D}{\pi} \qquad p' = \frac{\Delta a \cdot \cos \delta}{\pi} \qquad q' = \frac{\Delta \delta}{\pi}$$

p' und q' in Einheiten der 4. Dezimale.

In diesen Ausdrücken bedeutet:

- δ die geozentrische Deklination des Mondes für die Zeit T.
- D die Deklination des Sterns.
- π die Äquatorial-Horizontalparallaxe des Mondes (bezw. vermindert um die Parallaxe des Planeten bei Planetenbedeckungen) für die Zeit T.
- Δu und $\Delta \delta$ die Veränderung der geozentrischen Rektaszension und Deklination des Mondes (bezw. vermindert um die Veränderung des Planetenortes bei den Planetenbedeckungen), für eine Stunde mittlerer Zeit, gültig für die Konjunktionszeit T.

Nennt man ferner die geozentr. AR. des Mondes zur Zeit $T \dots u$, die AR. des Sterns . . . A, den geozentr. scheinbaren Halbmesser des Mondes...r, die Längendifferenz des Beobachtungsortes gegen Berlin...d (östlich positiv), die der mittleren Zeit T+d entsprechende Sternzeit des Ortes... θ , seine geozentrische Breite... φ' , seinen geozentrischen Radius vector in Teilen des Radius des Äquators... ϱ ; setzt man endlich (nach J. Peters Astr. Nachr., Bd. 138, S. 147)

$$\frac{r}{\pi} = k = 0.2725, \quad \log k = 9.4354$$
und $\log (15.3609.9 \sin 1'') = \log \lambda = 9.41916$,

so wird die Aufgabe der Vorausberechnung der Ortszeit etc. für die betreffende Bedeckung in Verbindung mit den obigen in den Tafeln gegebenen Werten gelöst durch die Bildung folgender Ausdrücke und die Ausführung folgender Rechnungen (nach Bessels Näherungsformeln im Jahrbuch für 1831):

$$p = \frac{(\alpha - A)\cos\delta}{\pi} (= \text{o für das Zeitmoment } T)$$

$$u = \varrho \cos \varphi' \sin (\Theta - A)$$

$$v = \varrho \sin \varphi' \cos D - \varrho \cos \varphi' \cos (\Theta - A) \sin D$$

$$u' = \lambda \varrho \cos \varphi' \cos (\Theta - A) \qquad = \left(\frac{du}{dt}\right)$$

$$v' = \lambda \varrho \cos \varphi' \sin (\Theta - A) \sin D \qquad = \left(\frac{dv}{dt}\right)$$

$$m \sin M = p - u \qquad n \sin N = p' - u'$$

$$m \cos M = q - v \qquad n \cos N = q' - v'$$

$$(m \text{ und } n \text{ stets positiv})$$

$$\tau = -\frac{m}{n} \cos (M - N).$$

Die Momente des Eintritts und des Austritts T_1 und T_2 des Sterns werden dann, wenn noch $\cos \psi = \frac{m \sin (M-N)}{k}$ (wo ψ immer kleiner als 180°) berechnet ist, gefunden durch:

$$T_{\mathrm{I}} = T + d + \tau - \frac{k}{n}\sin\psi$$
 $T_{\mathrm{2}} = T + d + \tau + \frac{k}{n}\sin\psi$.

Die Örter des Eintritts und Austritts an der Mondscheibe sind bestimmt durch ihre Positionswinkel:

$$Q_{\rm r} = N - 90^{\circ} + \psi$$
 $Q_{\rm r} = N - 90^{\circ} - \psi$.

Die so gefundenen Resultate werden indes von der Wahrheit sehr entfernt sein können, wenn die Korrektion τ , welche zu der Ortszeit der geozentrischen Konjunktion hinzugefügt werden muß, um die Ortszeit des auf den Beobachtungsort bezüglichen kleinsten Abstandes des Sterns vom Mondmittelpunkt zu finden, sehr beträchtlich ist; mit anderen Worten, wenn an dem betreffenden Ort zur Zeit T+d der Stundenwinkel des Mondes groß ist. In diesem Falle nämlich ist hauptsächlich die Berechnung der der Zeit folgenden Veränderungen von u und v durch die

ersten Differentialquotienten u' und v' bei der starken Änderung des Winkels $(\Theta-A)$ nicht mehr genügend, sondern man muß jetzt die zweite Näherung ausführen, indem man für die Ortszeit $T+d+\tau$ oder die Berliner Zeit $T+\tau=T_o$ berechnet:

$$p_{\circ} = \tau p'$$
 $q_{\circ} = q + \tau q'$ $\theta_{\circ} = \theta + \tau + \varepsilon$ $t = \theta_{\circ} - A$

(wo ε die Reduktion des mittleren Zeitintervalles τ auf Sternzeit bedeutet)

 $u = \varrho \cos \varphi' \sin t$ $v = \varrho \sin \varphi' \cos D - \varrho \cos \varphi' \sin D \cos t$ $u' = \lambda \varrho \cos \varphi' \cos t$ $v' = \lambda \varrho \cos \varphi' \sin D \sin t.$

Berechnet man mit diesen Werten

$$\Delta \tau = -\frac{m}{n}\cos(M-N),$$

so wird diese Näherung schon ziemlich ausreichend sein, um die Zeiten und Örter des Eintritts und Austritts zu finden, wie oben:

$$\cos \psi = \frac{m \sin (M-N)}{k}$$

$$T_{\rm I} = T + d + \tau + \Delta \tau - \frac{k}{n} \sin \psi \text{ u. s. w.}$$

Bei der Berechnung der ersten Näherung, welche τ ergibt, wird es aber nicht nötig sein, nach den ausführlichen Formeln bis

$$\tau = -\frac{m}{n}\cos(M-N)$$

zu rechnen, sondern man wird eine wesentliche Abkürzung und eine hinreichende Konvergenz der Näherung erreichen, wenn man setzt:

$$\tau = \frac{u}{p'-u'} \cdot \cdot \cdot \cdot$$

Wenn man hier noch statt des jedesmaligen, in den Elementen der Sternbedeckungen angegebenen p' den Durchschnittswert 0.5646 annimmt, läfst sich der Ausdruck

$$\tau = \frac{\varrho \cos \varphi' \sin (\theta - A)}{0.5646 - \lambda \varrho \cos \varphi' \cos (\theta - A)}$$

für eine bestimmte Polhöhe φ' sehr leicht mit dem Argumente des Stundenwinkels ($\Theta-A$) in eine Hilfstafel bringen, aus der man ohne Mühe den zur ersten Näherung hinreichenden Wert von τ bei westlichem Stundenwinkel positiv, bei östlichem negativ entnimmt.

Um für jeden Ort die erste Korrektion τ in Minuten ausgedrückt zu finden, kann die Tafel Seite [35] mit dem Horizontalargument »g'« und dem Vertikalargument »Stundenwinkel« dienen. Zur genäherten Bildung des letzteren Argumentes werden die Kolumnen der Mondephemeride, welche »Im Meridian von Berlin« überschrieben sind, von Nutzen sein können.

q'

	ψ										
t	o°	8°	16°	24°	32°	40°	48°	56°	64°	72°	t
h n	ın o	ni O	m O	n O	m O	m	nı O	m O	m	m O	h m
20	17	17	16	15	13	II	9	7	5	3	20
40	34	33	32	29	2 6	22	18	14	10	7	40
1 0	50	49	47	43	38	32	2 6	21	15	10	I O
2 0	65	63	60	55	49	42	34	27	20	13	20
40	78	76	73	67	59	51	42	33	24	16	40
2 0	89	88	84	77	68	59	49	38	28	19	2 0
20	98	97	93	85	76	66	55	43	32	21	20
40	106	105	100	93	83	72	60	48	36	24	40
3 0	112	110	106	98	89	77	65	52	39	26	3 0
20	116	115	110	102	93	81	68	55	41	28	20
40	119	117	113	105	96	84	71	57	43	29	40
4 0	120	119	114	107	97	86	73	59	45	31	4 0
20	120	118	114	107	98	87	74	61	46	32	20
40	119	117	113	107	98	87	75	61	47	33	40
5 0	117	115	112	106	97	87	75	62	48	33	5 0
20	114	113	109	103	95	86	74	62	48	33	20
40	110	109	106	IOI	93	84	73	61	47	33	40
6 0	106	105	102	97	90	82	71	60	47	33	6 0
20	102	IOI	98	93	87	79	69	58	46	32	20
40		96	93	89	83	76	67	56	44	32	40
7 °			88	84	79	72	64	54	43	31	7 0
20			83	80	75	68	61	51	41	30	20
40				75	70	64	57	49	39	28	40
8 0					65	60	53	46	37	27	8 0
2 0						55	49	42	34	25	20
40							45	39	32	23	40
9 0							41	36	29	21	9 0
20								32	26	19	20
40								28	23	17	40
I O O								24	20	15	10 0
20									17	12	20
40									13	10	40
11 0						1			10	7	11 0
20									7	5	20
40										3	40
12 0										0	12, 0

Für Orte, die nicht zu weit von Berlin entfernt sind, wird man aus dem für Berlin gegebenen Verzeichnis häufig schon ersehen können, ob eine Sternbedeckung stattfindet oder nicht; für näher gelegene Orte dürfte es in diesem Falle schon genügen, wenn man an die für Berlin gegebenen Zeiten des Ein- und Austritts nur die Längendifferenz anbringt. Wenn nämlich die Sehne vom Punkte des Eintritts zu dem des Austritts dem Mondmittelpunkt nahe liegt, so müßte der Unterschied der Parallaxe für Berlin und den anderen Ort schon nahe den Betrag des Mondhalbmessers erreichen, wenn dort die Sternbedeckung nicht sichtbar sein sollte; für nahe liegende Orte sind die Wirkungen kleiner Unterschiede der Parallaxen gerade in diesem Falle sehr gering.

Um allgemein für irgend einen Ort, dessen östliche Länge d und dessen geozentrische Breite ϕ' näherungsweise bekannt sind, im voraus zu bestimmen, welche Sternbedeckungen sichtbar werden, hat man nach den im Jahrbuch gegebenen Elementen folgendes zu beachten:

Nach den Angaben der Mondephemeride kennt man die Zeiten des Meridiandurchganges des Mondes (M), seine Deklination (δ) und die Deklination der Sonne. Nachdem man dann (T+d) gebildet, wird man mit Hilfe einer Tafel der halben Tagbögen (wie sie in den Handbüchern der Nautik für alle Breiten sich berechnet finden) meist sogleich entscheiden können:

1) Ob Eintritt und Austritt nach Sonnenuntergang und Mondaufgang oder vor Sonnenaufgang und Monduntergang stattfinden. Auf die Vergrößerung des Tagbogens durch die Bewegung des Mondes und auf dessen Parallaxe ist vorläufig hierbei keine Rücksicht geboten, da deren Wirkungen in ihren mittleren Werten mittels der Tafel Seite [35] durch τ berücksichtigt werden.

Aus vorstehender Tafel, in welcher τ das Zeichen des Stundenwinkels hat, erhält man sogleich mit q' und T+d-M einen Näherungswert für τ und hiermit den genäherteren Stundenwinkel $t=T+d-M+\tau$ und $q_*=q+\tau q'$. Einen genäherten Wert von v erhält man durch Berechnung von $\sin\left(q'-D\right)+\cos \varphi'\sin D\left(\mathbf{1}-\cos t\right)^{-1}.$

2) Ist nun $q_{\circ} - v < k$, so findet in der Regel eine Bedeckung statt, im entgegengesetzten Falle nicht. Da aber r zuerst nur annäherungsweise bekannt ist, so muß, wenn $q_{\circ} - v$ dem Werte von k nur nahe kommt, eine ausführlichere Berechnung angestellt werden.

In vielen Fällen dieser Art genügen indes schon einige weitere Betrachtungen zur Entscheidung, ob der aus der Tafel entnommene Wert von τ dem wahren Werte von τ sehr nahe kommt, größer oder kleiner ist. Man wird nämlich leicht entscheiden können, ob (q'-v') sehr klein,

¹⁾ Um für einen Ort eine allgemeine, für diesen Zweck genügende Tafel der v zu bilden, hat man höchstens 5 Werte von sin $(\varphi'-D)$ und 2 Werte von $\cos \varphi' \sin D$ auf 2 oder 3 Stellen zu berechnen.

positiv oder negativ wird, das Zeichen von $(q_o - v)$ ist in den erwähnten zweifelhaften Fällen sehr bestimmt zu erkennen. Der Wert von u hängt für eine bestimmte Breite des Ortes nur von sin t ab und kann nie größer als $\cos \varphi'$ werden. — Hiernach gilt folgende Regel:

3) Sind $(q_o - v)$ und (q' - v') gleichnamig (beide positiv oder beide negativ), so muſs $p_o - u = \tau p' - u$ negativ, sind jene ungleichnamig, so muſs $\tau p' - u$ positiv, ist (q' - v') sehr klein (also das Vorzeichen noch unbestimmt), so muſs $\tau p'$ nahe gleich u werden, wonach man den Taſelwert von τ sogleich um ein oder ein paar Zehntel der Stunde im richtigen Sinne verbessern kann.

Seite 415 enthält die Vorausberechnung der Sternbedeckungen für Berlin.

Jupiterstrabanten (S. 416-421).

Auf die Sternbedeckungen folgen die Erscheinungen der vier älteren Jupiterstrabanten, und zwar für sämtliche Trabanten zunächst die Angaben, aus denen man ihre Örter, wie sie vom Mittelpunkte der Erde aus gesehen zu einer beliebigen Zeit in Bezug auf den Mittelpunkt der Jupitersscheibe erscheinen, herleiten kann; sodann die Zeitangaben für die Verfinsterungen der Trabanten in dem Schattenkegel des Jupiter. Bei den Verfinsterungen ist für die beiden inneren Trabanten die Zeit des Ein- oder Austritts, für die beiden äußeren Trabanten die Mitte der Verfinsterung und ihre halbe Dauer angegeben, alles in mittlerer Berliner Zeit und so, wie man die Erscheinung beobachtet.

Für den geozentrischen Ort ist die Zeit der jedesmaligen scheinbaren oberen Konjunktion des Trabanten mit der Erde, d. i. die Zeit, wann Jupiter sich in der zur Trabantenbahn senkrechten Ebene zwischen der Erde und dem Trabanten befindet, angesetzt. Für jeden Trabanten kann man mit Hilfe der unten folgenden numerischen Angaben Tafeln berechnen, welche für die Dauer eines mittleren synodischen Umlaufs die Abszissen und Ordinaten des Ortes des Trabanten in seiner als kreisförmig angenommenen Bahn ergeben 1). Die Achse der Abszissen liegt senkrecht auf der Konjunktionsebene, beide Koordinaten natürlich in der Ebene der Trabantenbahn und ihr Anfangspunkt im Mittelpunkte der Jupitersscheibe. Die Einheit, in welcher die Koordinaten ausgedrückt sind, ist der Halbmesser des Jupiter. Die kreisförmige Bahn wird sich der Erde als eine Ellipse darstellen, deren kleine Achse in der Konjunktionsebene liegt, so dass die Abszissen ungeändert bleiben, die Ordinaten aber in dem Verhältnis der halben kleinen zur halben großen Achse vermindert werden müssen. Dieses Verhältnis, und zwar b:a, ist neben den Zeiten der oberen Konjunktion angesetzt. Wünscht man nun für eine Zeit T, welche zwischen zwei auf einander folgende Zeiten t und t' der

¹⁾ Solche Hilfstafeln sind in den Jahrbüchern bis zum Jahrgang 1871 gegeben.

oberen Konjunktion fällt, den Ort des Trabanten zu haben, so geht man mit dem Argument T-t

in die Hilfstafeln ein, nimmt daraus die entsprechenden Werte von x und y', und hat damit in Halbmessern des Jupiter den Stand des Trabanten in Bezug auf den Mittelpunkt des Jupiter gegeben durch

$$x$$
 und $y = y' \frac{b}{a}$,

wobei man die Zeichen von x, y' und b:a zu berücksichtigen hat. Das Zeichen der letzten Größe deutet an, welche Fläche der Trabantenbahn man sieht, ob die obere (nördliche, dem Nordpole der Ekliptik zugewandte bei positivem b:a), oder die untere (südliche).

Die Zeichen von x und y sind so gewählt, das für Berlin zur Zeit der Kulmination der Trabant für den Anblick im Fernrohre bei positivem x rechts, bei negativem x links vom Jupiter erscheint; bei positivem y ist er nördlich und beim negativen y südlich von einer Linie, welche mit den Streifen parallel durch das Zentrum des Jupiter gezogen werden kann.

Die Zeiten der Ein- und Austritte der Trabanten in die Jupitersscheibe kann man genähert aus

$$x^2 + y^2 = 1$$

berechnen.

Die Koordinaten der Trabanten berechnet man aus den folgenden Formeln:

$$\begin{array}{l}
x = [0.7559] \sin (203^{\circ}.40 t) \\
y' = [0.7559] \cos (203^{\circ}.40 t)
\end{array} \right\} \text{ Trabant I} \\
x = [0.9576] \sin (101^{\circ}.29 t) \\
y' = [0.9576] \cos (101^{\circ}.29 t)
\end{array} \right\} \text{ Trabant II} \\
x = [1.16017] \sin (50^{\circ}.235 t) \\
y' = [1.16017] \cos (50^{\circ}.235 t)
\end{array} \right\} \text{ Trabant III} \\
x = [1.40552] \sin (21^{\circ}.488 t) \\
y' = [1.40552] \cos (21^{\circ}.488 t)
\end{array}$$
Trabant IV,

wo t die seit der letzt vorangehenden oberen Konjunktion verflossene Zeit bezeichnet, ausgedrückt in Tagen, und wo die eingeklammerten Zahlen Logarithmen bedeuten. Die zu Grunde gelegten Werte der mittleren Entfernungen vom Jupiterszentrum (in Halbmessern der Jupitersscheibe) und die synodischen Umlaufszeiten sind beziehungsweise:

Die Angaben für die Jupiterstrabanten sind nach den Tafeln von Damoiseau und deren Fortsetzung von Pottier berechnet.

Saturnsring (S. 422-423).

Die Angaben für die scheinbare Größe des Saturn und für die Lage und Größe des Saturnsringes haben die folgende Bedeutung:

- α Große Achse des Saturn.
- β Scheinbare kleine Achse des Saturn.
- p_a Phase; positiv, wenn der Ostrand, negativ, wenn der Westrand verdunkelt ist.
- a Große Achse der Ringellipse.
- b Kleine Achse der Ringellipse; positiv, wenn die nördliche, negativ, wenn die südliche Fläche des Ringes sichtbar ist.
- U' Heliozentrische Länge des Saturn, gezählt auf der Ringebene vom aufsteigenden Knoten des Ringes in der Ekliptik an.
- B' Erhöhungswinkel der Sonne über der Ringebene vom Saturn aus gesehen; nördlich positiv, südlich negativ.
- P' Winkel der kleinen Achse der Ringellipse mit dem durch den Saturnsmittelpunkt gehenden Breitenkreise; östlich positiv, westlich negativ.
- U Geozentrische Länge des Saturn, gezählt auf der Ringebene vom aufsteigenden Knoten des Ringes im Erdäquator an.
- B Erhöhungswinkel der Erde über der Ringebene vom Saturn aus gesehen; nördlich positiv, südlich negativ.
- /' Winkel der kleinen Achse der Ringellipse mit dem durch den Saturnsmittelpunkt gehenden Deklinationskreise; östlich positiv, westlich negativ.

	1913	April 22	Aug.28	Dez. 34
N	Aufsteigender Knoten der Ringebene im Erdäquator, gezählt vom Äquinoktium an	126° 56.6	126" 57.5	126° 58.3

J Neigung der Ringebene gegen den Erd- 6 52.2 6 52.1 6 52.0

ω Entfernung der Ekliptik vom Erdäquator, gemessen auf der Ringebene

Es liegen folgende Bestimmungen nach Struve zu Grunde:

Durchmesser des Saturn in der Entfernung 9.53887

Äquatorial 17".47 Polar 15 .65

Lage des Saturnsringes gegen die Ekliptik und das Äquinoktium von 1889.25

 $\Omega_1 = 167^{\circ} 57'.0 \text{ und } i_1 = 28^{\circ} 5'.6;$

Durchmesser des Ringes in der Entfernung 9.53887 R = 39''.35.

Saturnstrabanten (S. 424-450).

Alle Berechnungen über die Saturnstrabanten sind mit den von H. Struve in:

- I. Beobachtungen der Saturnstrabanten, 1. Abteilung, 1. Supplementheft zu den »Observations de Poulkova«;
- II. Publications de l'Observatoire Central Nicolas, Série II, Vol. XI, abgeleiteten und im folgenden kurz angeführten Elementen durchgeführt. Einzelne Verbesserungen zu den Elementen hat Herr H. Struve handschriftlich mitgeteilt. Für die Halbachsen der 6 inneren Trabanten sind die auf Seite 239 der zweiten Abhandlung mittels der Saturnsmasse $\mu=\frac{\mathrm{I}}{3500}$ rechnerisch abgeleiteten Werte angenommen.

Mimas

(II, Seite 195).

Epoche: 1889 April o.o mittl. Gr. Zt. Epoche: 1889 April o.o mittl. Gr. Zt.

$$E_{\circ} = 127^{\circ} \text{ 19'.0}$$

$$n = 381^{\circ}.9945$$

$$\delta l = -44^{\circ}.243 \sin(116^{\circ}.46 + 5^{\circ}.075 t)$$

$$-0^{\circ}.75 \sin 3 (116^{\circ}.46 + 5^{\circ}.075 t)$$

$$l_{1} = E_{\circ} + nt_{d} + \delta l$$

$$\Theta = 54^{\circ}.7 - 365^{\circ}.3 t$$

$$\gamma = 1^{\circ} 36'.5$$
 $\Pi_{1} = 107^{\circ}.2 + 365^{\circ}.3 t$

e = 0.0190 a = 26''.814

Tethys

(11, Seite 195).

Epoche: 1889 April 0.0 mittl. Gr. Zt.

$$E_{\circ} = 284^{\circ} 31'.0$$

$$n = 190^{\circ}.69795$$

$$\delta l = +118'.90 \sin(116^{\circ}.46 + 5^{\circ}.075 t)$$

$$+ 2'.02 \sin 3(116^{\circ}.46 + 5^{\circ}.075 t)$$

$$l_{1} = E_{\circ} + nt_{d} + \delta l$$

$$\Theta = 110^{\circ}.55 - 72^{\circ}.5 t$$

$$\gamma = 1^{\circ} 4'.36$$

$$e = 0.0000$$

$$a = 42''.586$$

Enceladus

(II, Seite 183).

$$E_{\circ} = 199^{\circ} 19'.8$$

$$n = 262^{\circ}.73199$$

$$\delta l = + 11'.24 \sin(143^{\circ} + 92^{\circ}.4 t)$$

$$+ 20'.0 \sin(75^{\circ} + 29^{\circ}.3 t)$$

$$l_{1} = E_{\circ} + nt_{d} + \delta l$$

$$\Theta = 328^{\circ} - 152^{\circ}.7 t$$

$$\gamma = 1'.4$$

$$II_1 = 308^{\circ}.38 + 123^{\circ}.43 t$$

 $e = 0.0046$
 $a = 34''.401$

Dione

(II, Seite 183).

Epoche: 1889 A pril 0.0 mittl. Gr. Zt.
$$E_{\circ} = 253^{\circ} 51^{\prime}.4$$

$$n = 131^{\circ}.534955$$

$$\delta l = -1^{\prime}.21 \sin (143^{\circ} + 92^{\circ}.4 l)$$

$$-2^{\prime}.13 \sin (75^{\circ} + 29^{\circ}.3 l)$$

$$l_{1} = E_{\circ} + nt_{a} + \delta l$$

$$\Theta = 276^{\circ} - 31^{\circ}.0 l$$

$$\gamma = 4^{\prime}.0$$

$$H_{1} = 165^{\circ} + 31^{\circ}.0 l$$

$$e = 0.0020$$

 $a = 54'' \cdot 543$

Rhea

(II, Seite 176).

Epoche: 1889 April o.o mittl. Greenw. Zeit.

 $E_{\rm o} = 358^{\circ} \, {\rm 23'.8}$

 $n = 79^{\circ}.690087$

 $E - E_{\circ} = + 4'.95 \sin(347^{\circ}.3 - 10^{\circ}.1 t)$

 $l = E_{\circ} + nt_{d} + (E - E_{\circ})$ $\lambda - \Omega_{1} \sin i_{1} = 10^{\circ} 77 \sin(247^{\circ} 2 - 10^{\circ} 1.0) - 0^{\circ} 28 + 1^{\circ}$

 $(\Omega - \Omega_1) \sin i_1 = 19'.77 \sin (347^{\circ}.3 - 10^{\circ}.1 t) - 0'.38 + 1'.00 \sin (48^{\circ}.5 - 0^{\circ}.50 t)$ $i - i_1 = 19'.77 \cos (347^{\circ}.3 - 10^{\circ}.1 t) - 2'.79 + 1'.00 \cos (48^{\circ}.5 - 0^{\circ}.50 t)$

 $II = 305^{\circ} + 10^{\circ}.1 t$

e = 0.0009

a = 76".170

 Ω_1 und i_1 bezeichnen die Lage des Saturnsringes.

Titan

(II, Seite 172).

Epoche: 1890 Jan. 0.0 mittl. Greenw. Zeit.

 $E_{\circ} = 260^{\circ} 25'.1$

 $n = 22^{\circ}.577009$

 $E - E_{\circ} = + 4'.05 \sin(47^{\circ}.8 - 0^{\circ}.51 t)$

 $l = E_{\circ} + nt_{d} + (E - E_{\circ})$

 $\Omega = 167^{\circ} \, 51'.2 + 35'.84 \sin(47^{\circ}.8 - 0^{\circ}.506 \, t) + 0'.837 \, t$

 $= 27^{\circ} 28'.4 + 16'.88 \cos(47^{\circ}.8 - 0^{\circ}.506 t)$

 $II = 276^{\circ} 15' + 31'.7 t + 22'.0 (\sin 2 g - \sin 2 g_{\circ})$

 $e = 0.02886 + 0.000186 (\cos 2 g_0 - \cos 2 g)$

 $g = \Pi - \Omega - 4^{\circ}.5$

 $g_{\bullet} = g \text{ für } t = 0$

a = 176".578

Hyperion (11, Seite 290).

Epoche: 1890 Jan. 0.0 mittl. Greenw. Zeit.

 $E_{\circ} = 304^{\circ}.53$

 $n = 16^{\circ}.919983$

 $\delta l = 9^{\circ}.16 \sin (200^{\circ}.5 + 0^{\circ}.56206 t_d)$

 $l = E_{\circ} + n \cdot t_d + \delta l$

Äquinoktium: 1890.0. Epoche: 1890.0 + t.

 $\Omega = 167^{\circ} 49'.7 + 42'.4 \sin (47^{\circ}.8 - 0^{\circ}.50 t) + 78'.1 \sin (121^{\circ}.7 - 2^{\circ}.0 t)$ $i = 27^{\circ} 20'.8 + 19'.6 \cos (47^{\circ}.8 - 0^{\circ}.50 t) + 36'.2 \cos (121^{\circ}.7 - 2^{\circ}.0 t)$

Epoche und Äquinoktium: 1888.890 + t.

 $II = 276^{\circ}.50 - 18^{\circ}.663t + 14^{\circ}.0\sin(-0^{\circ}.84 + 19^{\circ}.191t) - 1^{\circ}.5\sin(-1^{\circ}.68 + 38^{\circ}.382t)$

 $e = 0.1043 + 0.0230 \cos(-0^{\circ}.84 + 19^{\circ}.191 t) + \delta e$

 $e\delta e = -0.00044 \cos(200^{\circ}.5 + 0^{\circ}.56206 t_d)$

 $a = 213''.92 + \delta a$

 $\delta a = -0.00354 \ a \cos(200^{\circ}.5 + 0^{\circ}.56206 \ t_a)$

Japetus

(1, Seite 87; II, Seite 139).

Epoche: 1885 Sept. 1.0 mittl. Greenw. Zeit.

$$\begin{array}{lll} E_{\circ} = 75^{\circ} \ 26'.4 & i = 18^{\circ} \ 28'.3 - 0'.54 \ t \\ n = 4^{\circ}.537997 & II = 354^{\circ} \ 30' + 7'.9 \ t \\ l = E_{\circ} + n \cdot t_{\circ} & e = 0.02836 + 0.000015 \ t \\ \Omega = 142^{\circ} \ 12'.4 - 1'.48 \ t & a = 514''.59 \end{array}$$

l₁,l = Mittlere Länge in der Bahn

n - Tropische mittlere tägliche Bewegung

 δl Libration

ta - Anzahl der Tage seit der Anfangsepoche

t = Anzahl der Jahre seit der Anfangsepoche

 $\Theta = ext{Knoten}$ auf dem Saturnsäquator

Ω = Knoten auf der Ekliptik

γ — Neigung der Trabantenbahn gegen den Saturnsäquator

i – Neigung der Trabantenbahn gegen die Ekliptik

 $\Pi_{\rm I}, \Pi = {
m Perisaturnium}$

e = Exzentrizität

a = Halbachse der Trabantenbahn in der mittleren Entfernung $(\varrho) = 9.53887$

 $l_{\rm I}$, $H_{\rm I}$ und Θ werden gezählt vom Äquinoktium aus in der Ekliptik, weiter im Saturnsäquator und dann erst in der Trabantenbahn, l und II vom Äquinoktium aus in der Ekliptik und weiter in der Trabantenbahn.

Zunächst sind für die fünf inneren Trabanten auf den Seiten 424 bis 434 die Hilfsmittel gegeben, um in bequemer Weise ihre Positionen ableiten zu können. Sieht man hierbei von den Neigungen γ ab, so erhält man die rechtwinkeligen Koordinaten x und y des Trabanten in bezug auf ein Achsenkreuz, dessen Anfangspunkt im Mittelpunkt des Saturn gelegen ist, dessen X-Achse parallel der großen Achse des Ringes verläuft, positiv, wenn östlich, negativ, wenn westlich vom Saturn, und dessen positive Y-Achse mit dem durch den Saturnsmittelpunkt gehenden Deklinationskreise den Winkel P einschliefst, aus den Gleichungen:

$$x = \frac{a(\rho)}{\rho} \frac{1}{1+\zeta} \frac{r}{a} \sin(u-U)$$

$$y = \frac{a(\rho)}{\rho} \frac{1}{1+\zeta} \frac{r}{a} \sin B \cos(u-U).$$

Die Größen U und B sind Seite 423 zu entnehmen. $(\varrho)=9.53887$ bezeichnet den mittleren Wert der Entfernung Sonne—Saturn, ϱ ist die Entfernung Erde—Saturn, u=L+(v-M) ist die wahre Länge des Trabanten vom Erdäquator an gezählt.

Ist genaueste Ortsbestimmung erforderlich, so darf man bei Mimas, Tethys und Rhea die Neigungen gegen den Saturnsäquator, da sie schon merklichere Werte annehmen, nicht mehr vernachlässigen; x und y ergeben sich dann aus:

$$\begin{split} x &= \frac{a(\rho)}{\rho} \frac{1}{1+\zeta} \frac{r}{a} \sin{(u-U)} \\ y &= \frac{a(\rho)}{\rho} \frac{1}{1+\zeta} \frac{r}{a} \sin{B} \left[\cos{(u-U)} + \sin{\gamma} \cot{B} \sin{(u-\theta)} \right]; \end{split}$$

hierin bezeichnet θ die Länge des aufsteigenden Knotens der Trabantenbahn auf dem Saturnsäquator, gezählt vom Schnittpunkte des Saturnsäquators mit dem Erdäquator; θ ergibt sich aus:

$$\vartheta = \Theta - \Omega_{\rm I} + \omega$$
für Tethys ist $\frac{r}{a} = {\rm I}$.

Will man aus x und y noch Rektaszensions- und Deklinationsdifferenzen bestimmen, so dienen dazu die Gleichungen:

$$s \sin (p - P) = x$$

$$s \cos (p - P) = y$$

$$\Delta \alpha = \alpha_{tr} - \alpha_{pl} = \frac{1}{15} s \sin p \sec \delta_{tr}$$

$$\Delta \delta = \delta_{tr} - \delta_{pl} = s \cos p.$$

Auf den Seiten 435 bis 443 finden sich für die drei äuseren Trabanten Titan, Hyperion und Japetus, außer den Hilfsgrößen U, B und P, die Rektaszensions- und Deklinationsunterschiede gegen den Saturn in dem Sinne Trabant minus Planet. Die aus den Angaben des Berliner Jahrbuchs ermittelten wahren Trabantenörter beziehen sich auf das mittlere Äquinoktium der Epoche.

Zum Schlus enthalten die Seiten 444—450 die Zeitangaben für die östlichen und westlichen Elongationen der Saturnstrabanten und für die oberen und unteren Konjunktionen von Japetus mit Saturn; diese Zeitangaben für die Elongationen und Konjunktionen sind bereits für Lichtzeit korrigiert, also ohne weiteres mit den Beobachtungen vergleichbar.

Konstellationen (S. 451).

In der Übersicht der Konstellationen des Jahres 1913 sind die hauptsächlichsten Planeten-Konstellationen gegeneinander und gegen Sonne, Mond und die Sterne 1. und 2. Größe, sowie die Angaben der Epochen, zu welchen sich die Planeten in gewissen Hauptpunkten ihrer Bahn und ihres synodischen Laufes befinden, zusammengestellt. Die Bedeckungen der Planeten und der helleren Fixsterne (bis

2. Größe) durch den Mond auf der Erde überhaupt sind hier ebenfalls nochmals mit aufgeführt. — Die Konjunktionen der Planeten mit dem Mond und untereinander sind als Konjunktionen in AR. zu verstehen. Letztere sind nur insoweit berücksichtigt, als die Differenz der Deklinationen beider Planeten den Betrag von 3° nicht übersteigt. Die Epochen der größten Helligkeit der Venus sind nach der Formel für die Lichtstärke von G. Müller (Publikation des Astrophys. Observatoriums zu Potsdam, Bd. VIII, Seite 197 ff.) berechnet.

Hilfstafeln (S. 452-464).

Es folgt eine Reihe von häufig gebrauchten Hilfstafeln.

- 1) Die Tafel zur Berechnung der physischen Mondlibration (Seite 452). Die zur Berechnung der physischen Mondlibration dienenden Ausdrücke sind auf Seite 452 vollständig gegeben. Sie beruhen auf der Annahme f=0.75, worüber F. Hayn (Selenographische Koordinaten III, Seite 49) einzusehen ist.
- 2) Die Tafel zur Berechnung der optischen Mondlibration (Seite 453 und 454) reproduziert (mit $J=1^{\circ}$ 32'6" berechnet) die Enckesche Tafel (Berl. Jahrb. 1843); sie gestattet in Verbindung mit den Angaben der Seite 88 die rasche Berechnung der optischen Libration in selenographischer Länge und Breite nach den Formeln, die auf Seite 454 vollständig aufgeführt sind. Hierbei ist die Kenntnis der auf den Beobachtungsort als Nullpunkt bezogenen Längen und Breiten des Mondes notwendig; man kann dieselben aus der mit Hinzufügung der Parallaxe berechneten AR. und Dekl. des Mondes ableiten, wozu man sich der gewöhnlichen Umwandlungsformeln oder, wenn nicht größere Genauigkeit erfordert wird, der Enckeschen Hülfstafel in der Veröffentlichung Nr. 14 des Recheninstituts bedienen kann.
- 3) Eine Tafel mit Angabe der Bruchteile des tropischen Jahres, die den nebenstehenden mittleren Daten (oh Mittl. Zeit Berlin) entsprechen. (Seite 455 und 456.)
- 4) Eine Tafel für die Ermittelung eines Datums in der julianischen Periode. (Seite 457 und 458.)
- 5) Die Hilfstafeln zur gegenseitigen Verwandlung von mittlerer Zeit und Sternzeit (Seite 459 und 460).
- 6) Eine Tafel zur Verwandlung von Stunden, Minuten und Sekunden in Dezimalteile des Tages und umgekehrt (Seite 461 und 462).
- 7) Eine Tafel der Hilfsgrößen zur Berechnung der Präzession von den hauptsächlichsten Sternkatalog-Epochen bis 1913.0 (Seite 463).
- 8) Eine Tafel der Hilfsgrößen zur Übertragung der Polsternörter von verschiedenen mittleren Äquinoktien auf das mittlere Äquinoktium von 1913.0 (Seite 464).

Koordinaten der Sternwarten (S. 465-472).

Die Seiten 465 bis 472 enthalten die geographischen und geozentrischen Koordinaten der Sternwarten.

Die Seehöhen sind in allen Fällen angegeben worden, wo sie sich einigermaßen sicher ermitteln ließen; zumeist sind sie dem Verzeichnis von Prof. Auwers im Geographischen Jahrbuch entnommen worden; bei der Berechnung von $\log \varrho$ sind sie berücksichtigt.

Die geozentrischen Koordinaten sind nach den Besselschen Erddimensionen berechnet.

Die Kolumne » Korrektion der Sternzeit« enthält für jeden Ort die Differenz: Sternzeit im mittleren Ortsmittag minus Sternzeit im mittleren Berliner Mittag.

Das Verzeichnis hat im vorliegenden Jahrgang Änderungen bezw. Zusätze für die Lage folgender Sternwarten erfahren:

Breteuil	nach	Mitteilung von Herrn René Benoît.				
Budapest	>>	» » » K. Oltay.				
Bukarest	»	Mitteil. v. Hrn. Prof. Albrecht, Potsdam.				
Coimbra	>>	dem Nautical Almanac 1913.				
Groningen	>>	Mitteilung von Herrn I. C. Kapteyn.				
Philadelphia (Flower Obs.)	>>	der American Ephemeris 1912.				
Turin } Venedig	*	dem Nautical Almanac 1913.				

Bahnelemente der kleinen Planeten (S. (2)—(38)).

Die Seiten (2)—(38) enthalten die Bahnelemente der kleinen Planeten nach den neuesten Bestimmungen. Die unmittelbar den Namen folgenden Kolumnen geben das Datum der Opposition im Jahre 1911 und die Größe des Planeten zur Zeit der Opposition.

Ferner sind gegeben zwei Kolumnen m_{\circ} und g, welche zur Berechnung der Größe des Planeten dienen. Es bedeutet m_{\circ} die mittlere Größe, d. h. diejenige Größe, welche der Planet in seiner mittleren Entfernung a von der Sonne und der gleichzeitigen Entfernung a-1 von der Erde haben würde; ferner ist g eine Größe, welche aus m_{\circ} nach der Formel

$$g = m_{\circ} - 5 \log a (a - 1)$$

berechnet ist, und welche dazu dient, für einen beliebigen geozentrischen Ort des Planeten seine Größenklasse M zu berechnen. Ist Δ die Entfernung des Planeten von der Erde, r seine Entfernung von der Sonne, so ist seine Größe

$$M = g + 5 (\log \Delta + \log r).$$

Seit dem Erscheinen des letzten Jahrbuches sind für die folgenden 17 Planeten elliptische Bahnrechnungen ausgeführt worden, so daß sie als gesichert mit Nummern versehen werden konnten:

675	DU	ent deckt	1908	Aug.	30	von	Metcalf, Taunton	
676	FN	>>	1909	Jan.	16	>>	Melotte, Greenwich	
677	FR	>>	>>	>>	18	>>	Kopff	
678	FS	>>	>>	>>	22	>>	Lorenz	
679	Pax	>>	>>	>>	2 8	»		
680	GW	>>	>>	April	22	>>	(Yr	
681	GZ	>>	>>	Mai	13	>>	Kopff Königstuhl	
682	IIA	>>	>>	Juni	17	>>	Konigstuni	
683	IIC	>>	>>	Juli	23	>>	Wolf	
684	HD	>>	>>	Aug.	8	>>	Kopff	
685	HE	>>	>>	>>	12	>>	Lorenz	
686	HF	>>	>>	D	15	>>	Kopff	
687	Tinette	>>	>>	>>	16	>>	1	
688	Melanie	>>	>>	>>	25	>>	Palisa, Wien	
689	HJ	>>	>>	Sept.	12	>>		
690	Wratislavia	>>	>>	Okt.	16	>>	Metcalf, Taunton	
691	Lehigh	>>	>>	Dez.	11	>>		

Oppositionsdaten der kleinen Planeten und ausführliche Oppositionsephemeriden

$$(S. (39)-(73)).$$

Von den 533 im Jahre 1911 und zu Anfang des Jahres 1912 stattfindenden Oppositionen der kleinen Planeten (1)—(691) ist Seite (39)—(52) eine übersichtliche Zusammenstellung, nach der Oppositionszeit geordnet, gegeben. In diesem Verzeichnisse sind neben dem Namen des Planeten der Tag der Opposition in AR., die Gröfse, der genäherte geozentrische Ort, die tägliche Bewegung an jenem Tage, der Logarithmus der Entfernung des Planeten von der Erde und aufserdem das Jahr, in welchem der Planet zum letzten Male beobachtet wurde, angegeben.

Für 21 Planeten, welche in dem Oppositionsverzeichnis durch ein Sternchen (*) bezeichnet sind, enthalten die Seiten (53)—(73) aus führliche Ephemeriden, welche der Redaktion von den unterzeichneten Herren gütigst zur Verfügung gestellt wurden; für 67 weitere Planeten, deren Beobachtung im Jahre 1911 erwünscht erscheint, sind genäherte Oppositionsephemeriden in der Veröffentlichung Nr. 40 des Recheninstitutes gegeben.

Nachweisungen über die kleinen Planeten

(S. (74)-(93)).

Das die Nachweisungen über die Beobachtung und Berechnung der kleinen Planeten enthaltende Verzeichnis gibt in zwei Abschnitten eine Übersicht der Stellen in den verbreitetsten Publikationsorganen, wo A. Beobachtungen, B. Berechnungen in bezug auf die kleinen Planeten sich vorfinden. Das Nähere ist aus dem Verzeichnisse selbst unmittelbar zu ersehen. — Die Übersicht umfast Band 182, S. 253 bis Band 186, S. 32 einschl. der Astronomischen Nachrichten (A.N.); das Bulletin Astronomique (B. A.), Band 26, S. 369 bis Band 27, S. 368; die Monthly Notices (M. N.), Band 70; Band V der Lick Observatory Bulletins (L. B.); Band 26, S. 39 bis 146 des Astronomical Journal (A. J.) und die Trahsvaal Observatory Circulars (T. C.). Die Übersicht bezieht sich auf die Zeit von 1909 Okt. 1 bis 1910 Sept. 30.

